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BASELINE SURVEY REPORT

SEPTEMBER, 2013

RTS Monitoring, Evaluation & Research (MER) Series # 1

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Authors

Drafted by: Glow Consultancy

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BASELINE REPORT

Co-Authored & Coordinated by:

Chitanda Rhodwell
Director; Monitoring, Evaluation and Research

Reviewed and contributed to by:
All RTS Technical Leads

Cover Design and Formatting:
Nephas Hindamu – *Communication & Knowledge Management Specialist*

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LIST OF ACRONYMS/ABBREVIATIONS

AIDS	Acquired Immune-Deficiency Syndrome
ANOVA	Analysis of Variance
CPD	Continuous Professional Development
DEBS	District Education Board Secretary
EFA	Education for All
EGRA	Early Grade Reading Assessment
ELM	Education Leadership and Management
GBS	Government Basic Schools
GRZ	Government of the Republic of Zambia
HIV	Human Immune-deficiency Virus
IR	Intermediate Result
MDG	Millennium Development Goals
MESVTEE	Ministry of Education, Science, Vocational Training, and Early Education
MOE	Ministry Of Education
NBTL	New Break Through to Literacy
NISTCOL	National In-service Teachers' College (Now Chalimbana University)
OVC	Orphaned and Vulnerable Children
PALS	Phonological Awareness Literacy Screening
PTA	Parent Teacher Association
PIRLS	Progress in International Reading Literacy Study
PLP	Primary Literacy Program
PMP	Performance Monitoring Plan
RTS	Read to Succeed
SACMEQ	Southern Africa Consortium for Monitoring Educational Quality
SESO	Senior Education Standards Officer
SIR	Sub Intermediate Result
SPSS	Statistical Package for Social Sciences
UNESCO	United Nations Educational, Scientific, and Cultural Organization
USAID	United States Agency for International Development
USG	United States Government
ZPC	Zambia Primary Course
ZANEC	Zambia National Education Coalition

EXECUTIVE SUMMARY

During the 1990s, many low-income countries committed to the goals of the United Nations Education for All, of ensuring universal access to primary education and students' completion of all primary grades. However, improvements in enrollment rates have not always translated into high-quality education -or even basic learning which is largely, a function of learners' ability to read. Assessment data of students' performance in low-income countries reveals that many students are not mastering the basic skills of reading (Yeats, 2010) at an early stage of their education, thereby affecting their lifelong achievements. Against this background, reading is widely accepted as the fundamental ability for higher learning. The best opportunity to teach children the skill of reading is in the early grades (1-3) or earlier if possible.

There is no question among educationists, academicians and policy makers that teaching young children to read is the cornerstone of improving educational outcomes in a country and has far-reaching positive implications for its social, economic and political development. Unless they learn to read at an early age, children cannot absorb more advanced skills and content that relies on reading. In addition, children who do not learn to read in the early grades risk falling further and further behind in later years, as they cannot absorb printed information, follow written instructions, or communicate well in writing and in speech. These challenges, rooted in poor reading skills, lead to low achievements and often early dropout from the education system.

In an effort to address the above scenario, the USAID/Zambia Read to Succeed (RTS) Project works towards improving reading through improved school effectiveness in government primary schools in selected districts in six provinces: Eastern, Luapula, Northern, North-Western, Western, and the newly created Muchinga. In October 2012, RTS conducted a baseline study of early grade reading skills, primary school teacher performance, head teacher performance, education official performance and general school assessment. The baseline results, aligned to project performance indicators were generated to inform program interventions, Ministry of Education, Science, Vocational Training and Early Education (MESVTEE), donors and other relevant stakeholders of the current status in the six districts of the Republic of Zambia. The results of the baseline survey will also serve as a benchmark to measure project impact in the coming years.

Survey Methodology

RTS tested grade 2 and 3 pupils' reading ability in four local languages in 197 government primary schools in Eastern, Muchinga, Northern, Luapula, North-Western and Western provinces. A representative sample of 4,000 children was (2,000 grade 2 and 2,000 grade 3 i.e. 10 grade 2 and 10 grade 3 pupils per school) was randomly selected from 200 schools across 16 districts (12 intervention and 4 control districts). The 4 control districts were selected based on 4 local languages in which EGRA was conducted; thus Icibemba, Chinyanja, Kiikaonde and Silozi. The schools were stratified by language and clustered by location (zone, district & province).

The Early Grade Reading Assessment (EGRA) is a tool used to measure students' progress toward learning to read. It is a test that is administered verbally to one student at a time. It examines a student's ability to perform fundamental pre-reading and reading skills. Apart from the EGRA sample, the survey also included a non-random sample of an average of 3 teachers per school for grades 1-4 (targeted 600 teachers but captured 487 representing 81%). The sample also included 199 head teachers thus, one from each school in the sample. The teachers were first observed teaching a reading lesson and later interviewed. The head teachers were interviewed and they were also asked to provide school statistics on different issues (enrolments, dropout rates, staff retention, progression rates etc.)

Summary Findings

EGRA Results: Baseline results showed low performance across sub-tasks, languages and across all six provinces with over 80% of both grade 2 and 3 learners failing to correctly sound a single letter or read a single word in a paragraph. The baseline survey established evidence that many students have not mastered the basic skills of reading in early grades of their schooling. This finding is consistent with that of the 2008 National Assessment Report conducted by Examinations Council of Zambia (ECZ) which concluded that "learning achievement levels still remain low in the country across all provinces". The Southern & Eastern African Consortium for Monitoring Education Quality (SACMEQ) Report in 1998 described literacy levels as "extremely poor reading performance" for grade 6 learners with only 25.8 % of the learners reached the minimum performance cut-off and only 2.3% reached the desirable performance cut-off.

The survey results also revealed that exposure to the same language outside of school may facilitate easier reading because the child repeatedly practices what is taught at school and what obtains in everyday home setup. The study demonstrated statistically significant results for three subtasks; letter sound knowledge, non-word decoding and oral passage reading, also referred to as reading fluency or reading aloud with $P<0.01$. This shows that language spoken at home has a profound effect on the child's ability to learn to read. In addition, the study established that there is a high correlation ($r=0.876$) between oral passage reading and non-word decoding, which means that a child who is able to decode non-sense words is more likely to record high scores in oral passage reading and vice-versa. Further, the study showed a high correlation ($r=0.716$) between reading comprehension and non-word decoding while the least correlation was between orientation to print and reading comprehension ($r=0.153$) which entails that a child's ability to decode is related to performance in oral passage reading and subsequently comprehension while their knowledge of orientation to print cannot be used as a proxy for reading comprehension competency.

Teacher Performance: Baseline results indicate that teachers have a fair amount of knowledge on how to teach reading as evidenced by high scores on questions related to how much they know about sounds. For example, over 85% of teachers show considerable good knowledge in letter sounds and other requirements necessary to teach literacy. Despite this knowledge, many teachers fail to successfully transfer it to the learners. They focus on conventional requirements (fulfilling expected deliverables) thus; they prepare lesson plans and other schemes of work without focusing on whether learning is taking place.

Our analysis shows that there are lower scores on matters/questions related to pedagogical practice. For example, only 41.6% of teachers said they write letters to match sounds which is much lower than 90% of those who correctly sounded the selected letters shown to them during the interview. On teacher performance, this survey concluded that there is limited knowledge transfer to the learners due to poor pedagogical practices thus; methodology of lesson delivery is poor, it's mostly teacher centered. This ties with analysis on EGRA where the evidence shows that learners fail to progress from letter sounds knowledge to reading or comprehension due to lack of or limited practice echoing the general notion that students' performance is reflective of teachers' practices. In addition, lack of enough space leading to reduced contact time for lessons mean that students are only met a few hours and are released to allow their colleagues to use the same classroom. Survey results further showed that as teacher experience increased, pupil performance scores also increased - implying a positive, but weak correlation. Therefore, class teacher qualification and experience has a significant relation with the pupil scores ($p=0.008$), agreeing with the 2008 National Assessment findings.

Head Teacher performance: Similar to the teachers, Head Teachers (HTs) also exhibit good knowledge in teaching reading (81.7%) and have good experience in their current positions with sufficient academic qualifications but equally suffer from pedagogical and leadership inconsistencies. For example, HTs do not conduct regular monitoring and support as well as weak mentoring and staff appraisal system; less than half (47.2%) of HTs reported that their teachers prepare individual improvement plans but only 35% produced proof during the interview.

Further, there was no evidence that HTs use assessment data to make decisions on learner performance. Analyzed baseline results show that HTs' training in relation to their roles as HTs is inadequate; only 27.9% ever attended Education Leadership and Management (ELM) course and 31.5% ever received training in how to carry out their duties.

The data further show that like their teachers, HTs also just focus on being compliant to systems requirements such as ensuring preparation of lesson plans with little or no effort on substantially improving learner outcomes. Given the weak support from district officials thus; less than half (48.7%) of the schools are monitored by officials in a year. HTs' chances of significantly improving their performance are still slim hence the need for interventions like the RTS project, MESVTEE and other partners who should work towards strengthening and sometimes reforming current practices. Over half of HTs reported that PTAs were not supportive and that parents do not actively participate in their children's learning process.

General School Information: Survey results indicate that the average number of students per class is 53, with the maximum number of pupils recorded at Ndakala Primary School (142) in Bulombwa Zone in Mungwi District of the Northern Province, while the minimum was 12 students. The above figures are not close to the recommended standard class size of 40 children. The baseline further shows that 84.3% and 87.8% of the schools in RTS provinces have no library and no resource rooms respectively. On average, there are 2 shifts in a school or 58.4% of RTS target schools run 2 shifts in a day while 36.0% have 3 shifts. The earliest time a school opens is 07:00hrs and the latest is 17:30hrs with shift durations ranging from 3 hours to 4 hours.

Data also show that there are 6 classrooms and 4 toilets on average in RTS schools. It should also be noted that that 7% of RTS schools have multi-grade classes for grades 1-4. With regards to accessibility, 11.2% of RTS target schools cannot be accessed by both students and teachers throughout the year due to distance, flooding or presence of wild animals. On distance, the data indicate that the average distance from the DEBS' offices is 66km while the furthest is 265km in Mwense district. Of all RTS schools, only 16% have electricity and slightly over half (53.8%) received support from NGOs ranging from scholarships, HIV/AIDS messages, teacher training, school supplies to counseling and tutoring.

MESVTEE Officials: Like teachers and HTs, officials too have considerable knowledge about how to teach reading with 57.1% of them who reported that they had previous experiences in teaching reading and 69% of them said they had previous experience in implementing New Break Through to Literacy (NBTL). This indicates that many officials know content and some methods of teaching reading but it raises a question on the support they provide to the schools towards improving reading. There is very low access to sufficient school information with only 16.7% of the officials having sufficient access. However, there are inconsistencies; on one hand, only 16.7% have access to sufficient information but on the other hand, 95.2% reported that they use information from schools for decision making.

Further analysis revealed that even though over 90% of officials use school information to monitor changes in the schools, only 23.8% of them use information from the school plan. This low result may be due to the fact that not all schools have school plans! It might also mean that officials just stick to conventional requirements like, enrolments, infrastructure, etc. without really helping the schools to focus on strategic steps outlined in the school plan. Above all, most rural schools are rarely monitored; even if school data were with the officials, they cannot use them to influence performance in the schools that they have not visited. The study also noted the strong link with zone heads (ZHs); 76% of information used by officials is generated by ZHs.

Conclusion: Overall, this baseline survey report has confirmed findings in other studies which have stated that there are very low reading levels in Zambia. Just like conclusions in the 2012 National Assessment Report which highlighted teachers' inability to successfully transfer their knowledge to the learners, this survey too, concludes that despite teachers' knowledge about the curriculum content, they exhibited weak pedagogical practices.

Thus, the methods of teaching reading are still more teacher centered, little contact with students and there are ineffective and inconsistent assessment practices. The learner is further inhibited by weak learner support systems at school and at home, lack of active community involvement in actual learning of their children and insufficient monitoring support visits by officials to schools which when all is added up together result into school ineffectiveness.

Recommendations:

- Improve Teacher Effectiveness in teaching how to read
- Strengthen school leadership and increased demand for accountability
- Increase the use of formative assessment for teachers' self-reflection and to provide feedback to improve teaching and learning
- Increase learner support and services through increased community engagement
- Increase evidence-based decision making processes by using local data to inform school improvement processes
- Increase availability of instructional materials

1.0.BACKGROUND

1.1. Introduction

Reading is the foundation skill to other learning activities in the classroom. The purpose of reading is comprehension; and the aim of comprehension is learning. Children who fail to learn to read in the first few grades of school are handicapped in later grades as they must absorb increasing amounts of instructional content in print form. Poor readers cannot develop proper writing skills and become self-guided learners in other subject areas. The basic reading skills necessary to become "literate" do not develop naturally; we have to learn to adapt the part of our brain that recognizes images to be able to recognize written letters and words (Wolf, 2007). As has been confirmed by scholars working to understand reading acquisition in multiple languages, in almost any alphabetic language in which print can be decoded into sounds, being able to read well requires a grasp of five basic skills (*National Reading Panel, 2000*):

- **Phonemic awareness**–focusing on, manipulating, breaking apart, and putting together sounds orally;
- **Phonics**–linking written letters to their sounds and forming spelling patterns;
- **Fluency**–achieving speed, accuracy and expression in reading;
- **Vocabulary**–knowing words (both oral and written) and their meaning; and
- **Comprehension**–understanding the concepts read or heard.

The assessment components are aligned with the essential and teachable reading skills - e.g., letter recognition, phonemic awareness, phonics, oral reading fluency, listening, and reading comprehension, so that results provide clear guidance for changing instruction methods and offer hope of improvement. Measurements of how quickly and accurately children can read a text out loud, and how much of it they understand, also align with a scientific and a popular understanding of what it means to be able to read.

According to Roskos et al (2009), reading development stages, the first three phases focus on the foundation skills of learning to read. Once children learn to apply the foundational reading skills, as early as when they are in Grade One, they can move beyond the task of decoding text. From Grade two, children begin to derive meaning. As children learn sounds that link to form words, they begin connecting those sounds to printed words and the idea behind those words. Thereafter, they start to identify letter sounds, form syllables and words and link words to form sentences, paragraphs and stories. It is at these crucial early stages that children transition from *learning to read* to *reading to learn.* At grade three and beyond, comprehension is the ultimate prize! Fuchs *et al* (2001), assert that the critical strand in this process is oral reading fluency, as measured by the number of words read correctly per minute.

In October 2012, RTS conducted a baseline survey of early grade reading skills at Grade 2 and 3, primary school teacher performance, head teacher performance, district MESVTEE official performance and general school assessment. The results of the baseline follow in this report with the purpose of informing program intervention, MESVTEE, donors and other relevant stakeholders of the current status in the six provinces of the republic of Zambia. Additionally, this report was undertaken to collect baseline data for eventual use to measure progress of project interventions. In the broader context it provided feedback regarding the relative effectiveness of various instructional approaches and to identify particular areas of need for further attention and investment by the MESVTEE and the donor community.

1.2. Read To Succeed Project Description

Read To Succeed Project is funded by the U.S. Agency for International Development (USAID) in partnership with the Government of the Republic of Zambia (GRZ). The Read to Succeed (RTS) Project is a five-year activity that aims to improve early grade reading through school effectiveness in Government primary schools in six provinces: Eastern, Luapula, Northern, North Western, Western and the newly-created Muchinga. A meager learning environment, weak school management and leadership, and insufficiently skilled teachers has combined with the consequences of poverty and the HIV-AIDS pandemic to create an environment - at school and at home - inimical to student learning and full participation in school. Zambia exhibits the lowest student achievement scores among the South African Development Community - SADC. RTS takes a "whole school, whole teacher, whole child" approach to ensure that GBSs become centers of learning, care and support providing children with opportunities to learn and flourish.

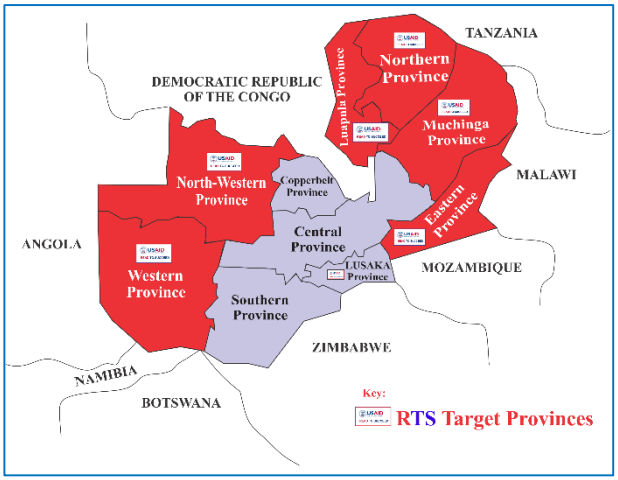


Figure 1: Map of Zambia showing project intervention provinces

Acquisition of reading skills in the early grades is critical to student performance in all subjects, successful progressions through primary school, and self-esteem. With the goal of improved reading outcomes, RTS works with Government counterparts to adapt or operationalize policies, enhance (or create) systems, and develop procedures to address five key elements common to effective schools - learning, teaching, school management, parental participation, and support for and responsiveness to children's needs that affect their ability to learn - so that educational and other services are routinely and effectively delivered to schools and children by government, not the project.

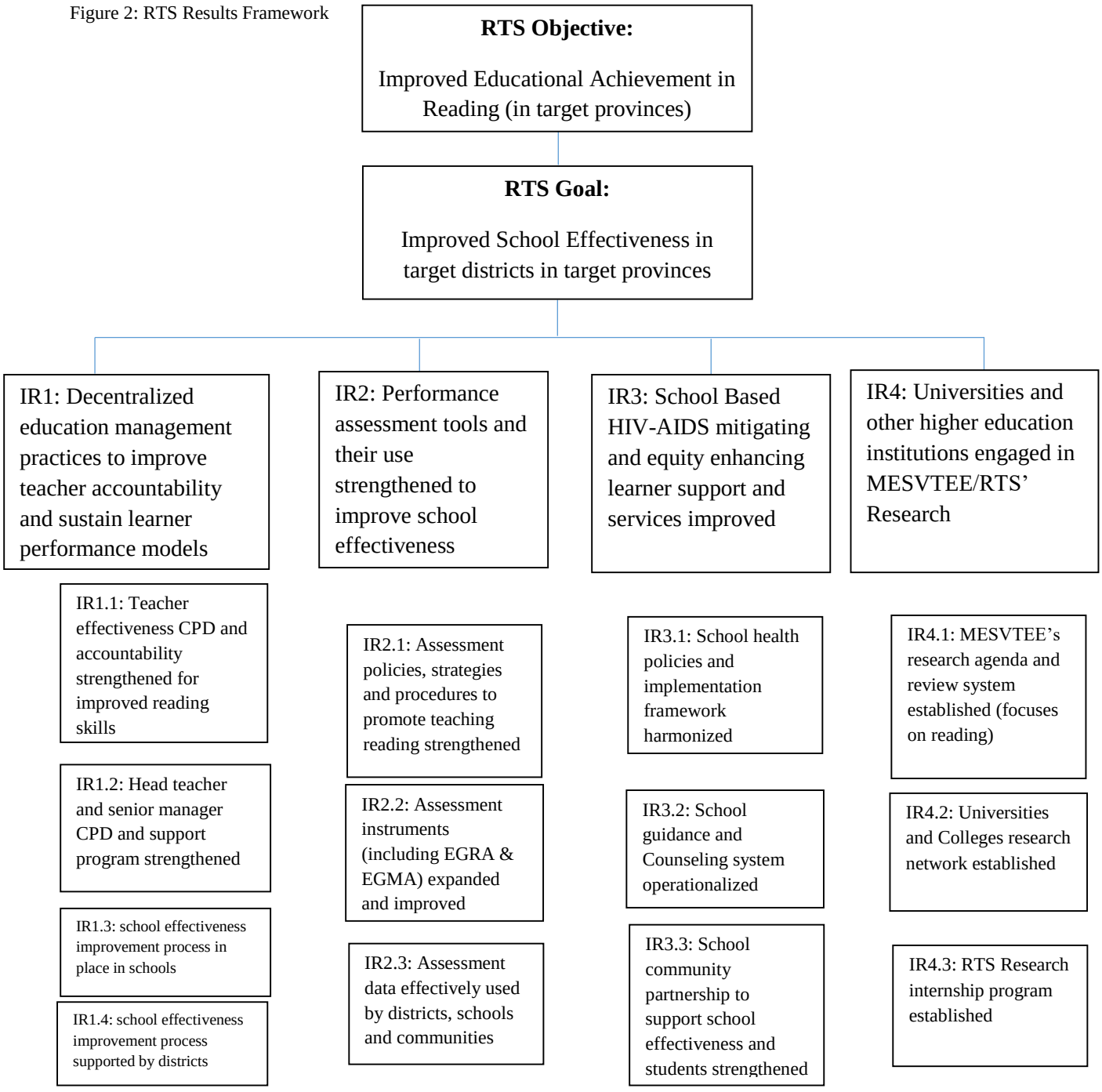
Employing a phonics-based approach to early grade reading in local languages, RTS develops teacher Continuous Professional Development (CPD program) and renders technical support to MESVTEE to develop materials for reading. RTS will apply face-to-face cluster level training augmented by school-based activities and regular cluster meetings.

Provincial and district personnel will develop reading and school effectiveness strategies and approaches, and district personnel will be actively engaged in school support to improve reading and ensure accountability. Guidance and counseling capacity at the schools will be established to help support girls and children, made vulnerable by HIV-AIDS. Communities will be engaged in provision of support and services to these children, as well as learning quality improvements. The University of Zambia and the provincial teacher training colleges will work together on the research agenda developed with the (MESVTEE) to analyze gaps and identify best practices for reading and school effectiveness.

1.3. RTS Result Framework (RF)

The RTS RF, presented below, graphically depicts the project's results-based strategy for achieving the RTS Objective & Goal and contributing to USAID/Zambia's IR 3.1 and Development Objective 3. The RTS Results Framework is organized on four levels: the RTS Objective, the RTS Goal, the Intermediate Results (IR), and Sub-Intermediate Results (SIR). The RTS RF provides the structure for its PMP, the work plan, budget, project chart of accounts, and reports.

Figure 2: RTS Results Framework



2.0. METHODOLOGY

2.1. Methodology

This Chapter outlines the processes and mechanisms of how the survey was designed and conducted. Particular attention was paid to sampling design and data collection procedures. The major domains of data collection and analysis were zone, district, province and an aggregate of six provinces. The other key domain was language, as it considerably influenced sampling design and development of data collection tools.

A representative sample of 4,000 children (2,000 grade 2 and 2,000 grade 3 i.e. 10 grade 2 and 10 grade 3 pupils per school) was randomly selected from 200 schools across 16 districts (12 intervention and 4 control districts). The 4 control districts were selected based on 4 local languages in which EGRA was conducted; thus Icibemba, Chinyanja, Kiikaonde and Silozi. This is the reason why there are no control districts for Luapula and Northern Provinces because Icibemba is spoken across three provinces. Therefore, the choice of Mpika was representative for all Icibemba speaking provinces.

2.1.1. Sampling Frame

The learners' target population for the RTS Baseline Survey was Grade 2 and 3 pupils enrolled in 200 Government primary Schools in Eastern, Muchinga, Northern, Luapula, Northern-Western and Western provinces. The sampling frame was obtained from the MESVTEE Directorate of Planning and Information. The table below summarizes the sampling frame.

Table 1: The RTS Baseline Sampling Frame-Noof Schools from Each District by

Language	Province	Districts	Randomization Arm	# Schools
Icibemba	Northern	Mungwi	Intervention	70
		Mporokoso	Intervention	64
	Luapula	Mansa	Intervention	134
		Mwense	Intervention	60
	Muchinga	Chinsali	Intervention	168
		Isoka	Intervention	45
		Mpika	Control	115
	Sub total			**656**
Chinyanja	Eastern	Chipata	Intervention	203
		Lundazi	Intervention	148
		Katete	Control	94
	Sub total			**445**
Kiikaonde	North Western	Solwezi	Intervention	118
		Mufumbwe	Intervention	36
		Kasempa	Control	51
	Sub total			**205**
Silozi	Western	Mongu	Intervention	112
		Sesheke	Intervention	76
		Kaoma	Control	122
	Sub total			**310**
			Overall Total	**1,616**

2.1.2. Sampling

The survey adopted stratified cluster random sampling technique. The schools were stratified by language and clustered by location (zone, district & province). Sampling was done district-by-district. The sampling procedure was done at two levels; (a) sampling zones and schools and (b) sampling pupils.

(A) Sampling Zones and Schools-Level 1

In order to make logistics easy, the RTS research coordination team decided to cluster schools by zone. This meant that once the zone was chosen, there was high probability of having more than one school in one zone hence reducing on travel time. The zones were selected using simple random sampling from the sampling frame obtained from the MESVTEE. The number of zones was determined after computing the average number of schools per zone. Thereafter, the total number of schools in both intervention and control schools was used as reference for comparing with the average per zone and then determined how many zones would be required to meet the number of schools selected. Thus if one (1) zone in Mungwi has 7 schools on average and number of schools required for baseline is 7, then 2 zones was adequate. Once the required number of zones was determined, then simple random sampling was used to pick the required number of zones using RANDBETWEEN Excel Function.

After choosing zones, the sampling frames were adjusted to only the list of schools that are in the selected zones. It should be noted that the computations of the schools/per zone ratio showed an average number of 7 schools per zone. Using the Mungwi example above, the sampling frame was about 14 schools and from this list, 7 schools were chosen using simple random sampling.

As evident from Table 4.2, all RTS intervention districts were included in the sample but control districts were purposively selected mainly based on easy of access from the provincial capital and language representation as already mentioned above. Other factors considered were similar characteristics of education pattern of the district near the provincial capital for purposes of comparative analysis.

(B) Sampling pupils-Level 2

The sampling method used in Level 2 was systematic random sampling. Selection of pupils was done at respective schools. Once the team arrived at the school and formalities were finalized, the team leader asked for the Grade 2 and Grade 3 class registers which were used for sampling actual children that were interviewed. The interval (I) was calculated by dividing the total number of children on the register with the sample size (s) which is 10. See illustration below:

$$I = \frac{\text{Total number of children registered in grade}}{\text{Sample size}}$$

For example, if there were 60 students registered in G2 and given the sample size of 10 pupils per grade, then the equation above was substituted as follows;

$$I = 60/10 \text{ and the answer is } 6.$$

After calculating the interval, it was then used to systematically pick every 'I^{th} student' on the class register. In the example above, it is every 6th student on the class register, starting with child number 6 on the class register. To ensure gender sampling took into account proportional balance for both girls and boys registered in each class so that neither was over or under represented. For example, if the initial selection result into 8 girls and 2 boys, systematic sampling was repeated if the ratio of boys to girls registered was skewed. If out of 60, there were 35 boys and 25 girls on the register, then the fairer sample was 6 boys and 4 girls.

The following table summarizes EGRA sample size and response rate by language, province and district.

Table 2: EGRA Sample Size & Response Rate

Language	Province	Districts	Randomization Arm	Target Schools	Actual schools	Target Pupils	Actual Pupils	Response Rate (%)
Icibemba	Northern	Mungwi	Intervention	7	7	140	137	98
		Mporokoso	Intervention	7	7	140	140	100
	Luapula	Mansa	Intervention	8	8	160	160	100
		Mwense	Intervention	5	5	100	100	100
	Muchinga	Chinsali	Intervention	8	8	160	161	99
		Isoka	Intervention	5	5	100	99	99
		Mpika	Control	10	10	200	189	95
	Sub total			**50**	**50**	**1000**	**984**	**99**
Chinyanja	Eastern	Chipata	Intervention	20	20	400	397	99
		Lundazi	Intervention	20	20	400	400	100
		Katete	Control	10	10	200	193	97
	Sub total			**50**	**50**	**1000**	**990**	**99**
Kiikaonde	N. Western	Solwezi	Intervention	32	30	640	620	97
		Mufumbwe	Intervention	8	8	160	175	109
		Kasempa	Control	10	10	200	198	99
	Sub total			**50**	**48**	**1000**	**993**	**99**
Silozi	Western	Mongu	Intervention	24	24	480	477	99.4
		Sesheke	Intervention	16	16	320	319	99.7
		Kaoma	Control	10	10	200	197	99.5
	Sub total			**50**	**50**	**1000**	**1000**	**99**
			Overall Total	**200**	**197**	**4000**	**3961**	**99.3**

Sample Substitution

In the event where the teams failed to reach the sampled schools for whatever reason (impassable road, collapsed bridge, abandoned school, uncooperative school management etc.), they substituted that school with another closest to it within the same zone.

Non EGRA Sampling

Apart from learners' sample for EGRA administration, the survey also included a non-random sample of an average of 3 teachers per school for grades 1- 4 (targeted 600 teachers but captured 487 representing 81%). The sample also included 199 head teachers thus, one from each school in the sample. The teachers were first observed teaching a reading lesson and later interviewed. The head teachers were interviewed and they were also asked to provide school statistics on different issues (enrolments, dropout rates, staff retention, progression rates etc.)

Training

Training was divided in two parts; (a) team leaders (supervisors) were trained for three days and (b) all assessors including team leaders for 5 days. This meant that supervisors were trained for 8 days (i.e. first 3 days plus 5 days when all assessors joined them). The team leaders were oriented to project design which aimed to help them understand the project context. In addition, team leaders were oriented to the survey purpose and objectives. This was important because it helped them understand their mission and role in the survey. The training was hands-on and participatory in many ways. Facilitators organized the assessors in component specific groups *(i.e. EGRA assessors, classroom observation/teacher assessors & head teacher/school data assessors).* Each group went through its respective survey questionnaire(s) step-by-step. After going through each questionnaire question-by-question, facilitators ensured that all assessors practiced through role plays within each group.

The discussion and feedback from practice sessions helped assessors to reinforce understanding of the survey instruments and further helped the facilitators to re-align some questions to what was real and practicable.

Pre-testing
As part of training, all data collection tools were pretested at 9 government basic schools in Lusaka. These were Authur Wina Basic School, Mtendere Basic School, Chibelo Basic School, Libala Stage 2 Basic School, Lusakasa Basic School, Woodlands A Primary School, Woodlands B Basic School, Vera Chiluba Basic School and Mkandawire Basic School. Since there were 9 teams, each team went to one school and each assessor practiced using their questionnaire in a real setting. Feedback from pre-tested questionnaires was used for the final questionnaire editing before teams were deployed to the field.

Baseline Data collection
Data were collected simultaneously in all 16 districts and the whole fieldwork exercise began on October 15th and ended on 9th November 2012. Nine survey teams comprised 5 persons each; 2 for EGRA testing, 2 for classroom observation/teacher interview and 1 for head teacher interview as well as school data.

2.2. Data Collection Tools

There were five sets of data collection tools for different target survey respondents. This was in line with RTS intervention approach which targets 'whole school', 'whole teacher' and 'whole child'. The following were the tools used.

Early Grade Reading Assessment (EGRA)
The EGRA tool was administered by University of Zambia students in respective official local languages to grades 2 & 3 learners in all schools in the sample. The tool has 7 tasks on which learners were tested.

The tasks were:

- Letter sound knowledge (phonemic awareness)
- Non-Word Decoding/Reading
- Oral passage reading (reading fluency)
- Reading comprehension
- Listening comprehension
- English Vocabulary
- Orientation to Print

The Classroom Observation Tool & Teacher Interview and Performance Checklist
This tool was intended to capture actual action of how teachers taught reading lessons in schools. The focus of this tool was on observing classroom environment, classroom organization, instructional content, class activities, teaching methods, teacher's assessment of learners, teacher position while teaching and the overall observer's reflection of the reading lesson.

To make one complete set, the same teacher whose reading lesson was observed was later interviewed by the same observer. Questions centered on classroom management, lesson planning, time on reading, reading knowledge, teaching methods, teaching aids, student assessment, continuous professional development, teacher monitoring and support and interaction with parents.

Head Teacher Interview and Performance Checklist Form & School Data
With an aim to capture issues on leadership, the survey interviewed Head Teachers on different aspects. Among them were; general pedagogical leadership, pedagogical leadership with a focus on reading, school management, guidance and counseling, continuous professional development, community support, and external monitoring support from provincial and district officials.

Related to the Head Teacher Interview and Performance Checklist Form was the School Data Form which collected data on general school information (state of infrastructure such as classrooms, toilets, furniture, adequacy of reading materials, availability of electricity, running water etc.). Other key data were enrolments for academic years 2011/2012, teacher details and girls and OVC services provided at the school.

MESVTEE Officials Interview

This form captured data relevant for assessing provincial and district officials' support to the schools. The officials were interviewed by RTS provincial leaders and/or RTS staff based in Lusaka except in instances where no RTS staff was present like it was the case for Kasempa where the team leader took up this responsibility. The targeted officials were:

- 1 SESO Languages (provincial), 1 Provincial Resource Centre Coordinator who works with basic
- schools
- 1 DEBS
- 2 (District) Education Standards Officers: General Inspection (1 per intervention district)
- 2 District Resource Centre Coordinators who works with basic schools (1 per intervention district)

2.3. Data Quality Assurance

In this survey, data quality assurance was embedded in the entire process from design to report writing to ensure rigorous methods and credible results. First, the tools were developed in close consultation with key stakeholders; MESVTEE officials from different directorates (Standards, Planning, Teacher Education and Examinations) and USAID partner projects (Time to Learn) had their input in the tools development process. Second, data collectors were all thoroughly trained (8 days for team leaders and 5 days for others). This ensured uniform understanding of the survey objectives and how to use the survey tools. The practical approach (role plays) on how to use data collection tools during training and the pre-testing of all tools gave the data collectors or assessors the feel of real practice of the assignment, thereby enshrining validity and reliability of results.

In order to further re-enforce and ensure consistency of data quality, all team leaders were given a copy of the survey guidelines - see copy in Annexure A. The guidelines detailed all survey procedures including sampling at school level, reporting lines, daily feedback team meetings, coding questionnaires, how to replace a school, how to summarize qualitative data and what to do with questionnaires before submission to RTS office in Lusaka. In addition, all teams worked under the leadership of the RTS officials; either provincial team leaders and/or advisors based in Lusaka. All supervisors in the chain checked the questionnaires for consistency and completeness.

The Survey Coordinator was in touch with all survey team leaders to ensure a seamless process of data collection through daily briefings. The briefings were essential because team leaders were given advice on what to do in real time thereby avoiding delay in survey implementation. At the end of data collection, all questionnaires were cross-checked by the Survey Coordinator for errors and completeness before they were passed on to the consultant for data entry. The consultant hired is qualified with over 10 years' experience in the field of M&E and data processing which guaranteed quality outputs.

2.4. Data Processing & Analysis

As mentioned in the data quality assurance section above, all questionnaires were sorted, batched according to districts by type. They were checked for correct coding and consistency. Data were entered into MS Access software. The consultant developed a relational data entry template/screen which has strong *in-built variable specific, self-prompting anti-error mechanisms*. The data entry system enabled trained data entry clerks to input only what was required for respective variables.

At the end of data entry, all merged data files were checked by the consultant and Survey Coordinator at RTS. All records with missing, inconsistent or incomplete fields were removed from the data file used for analysis. The final data file was submitted in format compatible with other statistical software such as SPSS, STATA and MS Excel.

Data was analyzed using a combination of software MS Access, SPSS and MS Excel. Analysis was mainly descriptive i.e. mean, median, mode, range, standard deviation and related statistics. Statistical testing took the form of Analysis of Variance (ANOVA), Chi-Square, Correlation and Regression (simple & multiple). All statistical tests were important because they enabled researchers to isolate variables' contribution and/or their association or relationship.

2.5. Limitations

Like any baseline study, this study only describes the situation as it is prior to implementation. It does not prescribe strategies on how to address the gaps or imbalances revealed by results. However, RTS hopes that results presented in the report will stimulate discussions on how to devise measures to address gaps at both project and MESVTEE level. Further, it is important to note that learners' performance may have been affected by "stranger intrusion". Thus, learners were interviewed by strangers - (people they had never seen before) which might have unnerved some of them and in a way, could have affected their responses.

To minimize this effect, data collectors were thoroughly trained on how to handle children in a reassuring and friendly way. The other important limitation to note is the fact that the EGRA test is not curriculum based which entails that learners were tested in something they were not taught in class, thereby increasing the probability of failure since the test was unfamiliar. In addition, this survey did not collect qualitative data that could have provided rich contextual explanations to support generated statistics.

3.0. FINDINGS AND DISCUSSION

3.1. Early Grade Reading Assessment (EGRA)

Overall, reading skills are low on the 7 sub tasks among grades 2 and 3 learners in the six provinces. Very few students in the sample could read with enough fluency to allow for real comprehension. In **table 3,** the percentages of zero scores are presented. These are children who were unable to sound a single letter or read a single syllable or word or read words in a passage correctly. Based on this data, 55.3% of both grades 2 and 3 learners could not sound letters correctly and are therefore likely to have problems to read and comprehend for purposes of learning at later stages of the learning development process. These results are below expectations especially when considering research literature which has shown that students should be able to be fluent readers by the end of two years of schooling if they were to succeed in their future education development. The basic skills required by students to read and comprehend are not being developed. Table 3 below has more details concerning students who could not get a single correct answer on any of the tasks.

Table 3: Percentage of learners who got zero scores across subtasks… This table shows percentage of learners who did not get a correct mark at all when they were tested in all listed subtasks below. The opposite is the percentage of learners who were able to, at least, sound one letter, read one word correctly or simply do one thing right on a given task.

Subtasks	RTS EGRA (2012 Baseline)			USAID/RTI[1] EGRA (2011 Pilot Survey)
	Grades			Grades
	2	3	Both	Both (G2 &3)
Letter sound knowledge	61.9%	48.7%	55.3%	46.1%
Non word decoding	90.0%	80.2%	85.1%	81.6%
Oral passage reading	89.0%	79.7%	84.4%	84.5%
English vocabulary	25.1%	25.6%	25.4%	-
Orientation to print	27.5%	22.9%	25.2%	-
Reading comprehension	94.4%	87.8%	91.1%	88.6%
Listening comprehension	22.4%	18.2%	20.3%	20.2%

From the above table, it is clear that the most difficult tasks are reading comprehension followed by non-word decoding and oral passage reading while the relatively easy tasks are listening comprehension, English vocabulary and orientation to print. The results show that both grades 2 and 3 learners have relatively good knowledge in letter sounds with about 40% and over 50% of respective grade 2 & 3 learners who were able to at least correctly sound one letter. Despite having a fair amount of knowledge in letter sounds, learners failed to acquire mastery skills in decoding, reading fluency and comprehension. This demonstrates a disjuncture between the foundation (letter sounds) and progression towards core reading skills where once learners are introduced to correct letter sounds, there is no progression plan on how to sustain the acquired basic skills. In short, learners lack necessary practice and therefore fail to master reading skills as reflected in the high proportion of them failing to read a single word in reading comprehension, oral passage reading and non-word decoding with zero scores of 94.4%, 89.0% and 90.0% respectively for grade 2 learners.

It should be noted that grade 3 learners performed slightly better than their counterparts in grade 2 in all subtasks except English vocabulary, even though the differences were not significant.

[1] Research Triangle Institute (RTI) conducted the EGRA test in 2011 in four provinces (Luapula, Northern, Copperbelt and Central) with a sample of 800 children. As seen in Table 3, their results are very close to those in RTS survey in 2012. The survey was sponsored by USAID

Even though the scores for Orientation to Print were high, they were not high enough to meet project expectations. Since this subtask was the easiest, the project did not expect to find a proportion as high as 27.5% of grade 2 and 22.9% of grade 3 learners to score zero on this task.

According to baseline results, the probable explanations for this outcome lies in the contact time; where in some cases, learners spend less than 3 hours in school let alone amount of the time spent on actual learning in class that ranges between 50 minutes to 1hour 30 minutes for literacy sessions. Time on task and contact time is affected by both teacher and pupil absenteeism due to various reasons. In some cases teachers spend two to four days every month when they leave their work stations to collect salaries from the banks and when attending to CPDs and political activities organized during school days. As for students, some abscond school to attend to family economic demands such as fishing, farming, heading cattle, collecting caterpillars and other activities etc. Baseline data also show that other reasons may include the teacher-centered approach which is less interactive, weak teacher-driven continuous assessments practices, lack of appropriate reading materials to aid consolidation, inadequate active parent involvement in learners' academic process, insufficient learner support systems and lack of adequate support from district officials particularly in reading. Further analysis on EGRA performance by grades 2 and 3 learners is presented in subsequent subsections in form of mean scores, median scores and some selected statistical tests on certain associations across the seven subtasks:

The table below shows a similar trend in learners' performance where; reading comprehension, oral passage reading and non-word decoding have the lowest mean scores, thereby demonstrating once more that these three subtasks are the most difficult reading skills to acquire. Baseline data indicates that reading comprehension is particularly more problematic to learners than any other EGRA subtask test.

Table 4: EGRA mean scores segregated by grade

Sub-Task	Grade 2		Grade 3		Possible total Score
	Mean	Median	Mean	Median	
Letter Sound Knowledge	3.10	0.00	4.86	1.00	100
Non word Decoding	0.98	0.00	2.15	0.00	50
Oral passage reading	1.32	0.00	2.99	0.00	65
English Vocabulary	5.91	7.00	6.27	7.00	20
Orientation to Print	1.85	3.00	2.07	3.00	3
Reading Comprehension	0.09	0.00	0.20	0.00	5
Listening Comprehension	1.58	2.00	1.75	2.00	3

Table 4 above further underscores the explanations in preceding paragraphs above which suggest the lack of sufficient instruction in decoding skills leaves learners without proper skills to read or decode new words. The probable reason could be in the way the curriculum is organized; such that it puts focus on the building blocks for reading such as phonics but fail to put in place strategies for dealing with new words in the learning process or general problem solving skills.

To improve reading and learning, the international community is pushing for different strategies of teaching reading, thus calling for appropriate content and interactive lessons delivery techniques.

Some studies, for example, have shown that in third grade, friendships become extremely important, as children long to be part of a group. In fact, they may be overly sensitive and dramatic about their school friendships. Skillful teachers take advantage of third graders' need for social interaction by planning small and large group work on longer and more complex projects. Group work is also a good way for teachers to match students with different strengths and weaknesses.

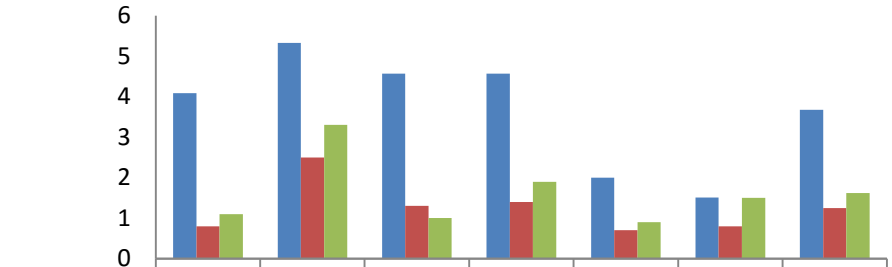
A struggling reader might pick up a new reading strategy from a more literate peer, but may also take pride in being the "master" artist that the group relies on. According to *Roskos et al. 2009*, stages of reading development - grades 1-3, ***confirmation and fluency***, students develop fluency in reading, recognize patterns in words, check for meaning and sense, and know the stock of sight words. At this stage, children are learning to read! However, this global context of how reading and learning should take place is not obtaining in the RTS target schools given the extremely low test scores.

In order for the reader to understand the intricacies among and between subtasks and be able to relate RTS survey results to the global understanding of literacy, it is necessary to briefly explain the relationships. It is a fact that the relationship between oral reading fluency and reading comprehension is close because the fluency portion of the task measures whether students have the ability to read with enough speed and automaticity so that they can concentrate on comprehension rather than sounding out every word. Learners who sound out each word use most of their working memory thinking about the sounds that letters make and then putting the sounds together. While students who read fluently decode words automatically and can use their working memory to make meaning of what was read, reading fluency is necessary but not sufficient for comprehension, since it is only one piece of the comprehension process (Roskos et al. 2009).

As established, letter sound knowledge is the first step and predictive skill for later reading success. Baseline findings suggest the need for more explicit teaching of letter recognition, evidenced by low median scores (zeros) for both grades 2 & 3 scholars. Successfully managing this process requires the ability to work systematically; thus moving from letters to sounds to words ensuring that students grasp the mechanics of identifying and blending words or sounds while at the same time understand the process of separating (and manipulating) words into sounds.

With regard to provincial performance, the picture appears uniform except for Luapula Province whose scores are above those of other provinces. The mean scores for Luapula Province are consistently higher in six subtasks out of seven. See figure 1 for comparison of the first three subtasks where Luapula surpasses all the other provinces.

Figure 1: Mean Scores by Province for three subtasks



	Eastern	Luapula	Muchinga	Northern	North-Western	Western	National
Letter Sounds	4.09	5.33	4.57	4.57	2	1.51	3.68
Non-word	0.8	2.5	1.3	1.4	0.7	0.8	1.25
Oral Passage	1.1	3.3	1	1.9	0.9	1.5	1.62

Consultations with ministry officials from Luapula and discussions among project staff knowledgeable in literacy point to the fact that the province had strong leadership at Provincial Education Office (PEO) level which instructed and made sure that all grade one classes were handled by teachers trained in NBTL.

In addition, Luapula Province piloted Literacy Clinics in some schools with support from USAID EQUIP 2 Project. In 1998, SACMEQ found that Luapula had marginally higher scores than other provinces in literacy tests when they wrote in the policy paper; "the mean scores varied only marginally between provinces - from a low of 16.7 in Southern to a high of 19.8 in Luapula". This is, may be, an indication that Luapula Province has always been doing relatively well in literacy compared to other provinces.

For the rest of the mean scores across all subtasks and provinces, please see table 5 below:

Table 5: EGRA mean score per province

Province	Letter Sound Knowledge	Non Word Decoding	Oral Passage Reading	English Vocabulary	Orientation to Print	Reading Comprehension	Listening Comprehension
Eastern	4.68	1.27	1.61	5.35	1.91	0.08	1.83
Luapula	7.41	3.11	4.38	9.05	2.13	0.30	1.92
Northern	5.73	2.21	2.42	7.89	2.36	0.13	2.28
N/Western	2.73	1.18	1.45	6.93	2.64	0.14	1.76
Western	2.34	1.24	2.54	4.30	1.01	0.19	1.05
Muchinga	5.52	2.33	2.37	6.98	2.29	0.1	1.90
Overall Mean	**3.95**	**1.55**	**2.13**	**6.09**	**1.96**	**0.14**	**1.66**
Total possible	**100**	**50**	**65**	**20**	**3**	**5**	**3**

3.1.1. EGRA Analysis Specific to Subtasks

Letter Sound Knowledge

The letter sound subtask measures learners' ability to sound individual letters in their language of official instruction. In table 5 above, mean scores for each province are shown - with the highest scores seen in Luapula (7.41) followed by Northern Province (5.73). The least scores were observed in Western province (2.34). Analysis by gender against scores showed, girls scored an average of 3.83 and males 4.06 on the letter sound knowledge test. The observed differences were statistically significant with p=0.0001. The overall mean score of 3.95 letters sounded correctly is way below acceptable standards according to pre-school and grade standards and assessment. The minimum desirable letter sound knowledge score is 10 alphabetic letters according to the Colorado Department of Education, Research and Evaluation.

Non Word Decoding

In this sub task, learners were examined on their ability to decode words they are not familiar with. Non word reading (sometimes also called invented or meaningless words) is a measure of decoding ability and is designed to avoid the problem of sight recognition of words. Many children in the early grade learn to memorize or recognize a broad range of "sight" words (Words primary school children should recognize on sight, as many of these words are not easy to sound out and thus must be memorized. Exhaustion of this sight-word vocabulary at around age 10 has been associated with the "4th grade slump" in the United states- (Hirsch, 2003). Considerable evidence suggests that memorization of text is a significant problem in many low income countries such as Zambia. In table 5 above, learners in Luapula were able to decode 3.11 words on average and the second highest was Muchinga with 2.33. Across all the provinces, we observed an average mean score of 1.55 nonsense words successfully decoded out of a possible 50 nonsense words. Girls scored an average of 1.33 and males 1.77 on the non-word decoding test indicating a statistically significant difference between male and female performance (p=0.0035).

Oral Passage Reading

Oral reading fluency is a measure of overall reading competency. It is the ability to translate letters to sounds, unify sounds into words, process connections, relate text to meaning, and make inferences to fill in missing information (Hasbrouck & Tindal, 2006). Because oral reading fluency captures this complex process, it can be used to characterize overall reading skills. From table 5 above, learners in Luapula showed a slightly higher score (4.38) in this subtask, while the overall average was 2.13 across all the provinces. In this subtask, girls scored an average of 1.89 and males 2.36 which demonstrated that there are statistically significant differences between males and females p=0.034. In the first three subtasks, boys performed better than girls and the differences in scores are statistically significant at 0.05 level of significance. In their journal article, Measuring Early Literacy Skills: A Latent Variable Investigation of the Phonological Awareness Literacy Screening for Preschool, Townsend & Konold (2010) suggested that a child must read fast enough, at least 60 words per minute, or correctly answer 67 percent of the questions in order to understand the text. Unfortunately, the RTS baseline results are not anywhere near this benchmark given the low scores obtained.

Reading Comprehension

This subtask measures learners' ability to understand the story and be able to remember what they have read about in the story. Learners are asked questions about the story and they give responses by remembering what was in the story in table 5, the average mean score was 0.14 out of possible 5 test sentences. Overall learners' average score ranged from 0.08 to 0.14 out of possible 5 correct responses. Baseline results revealed that this is the most problematic subtask with highest percentage of learners that scored zero in the test. Performance in this subtask is directly related to other subtasks like non-word decoding and oral passage reading which means that low scores in these two subtasks squarely effects learners' ability to perform better in reading comprehension and vice versa.

In this baseline, results show that the relationship between decoding speed and reading comprehension is particularly strong among young readers, as their word recognition skills still require conscious control. This was supported by a large correlation coefficient (r = 0.781) between students' scores in oral reading fluency and reading comprehension. This means that there is a strong relationship between children's oral reading fluency and their ability to understand what they read. It also means that if learners' reading fluency is poor then their reading comprehension will equally be poor. Thus, addressing students' word recognition and decoding skills is a critical step for improving their reading comprehension.

Listening Comprehension

In the listening comprehension subtask, learners listened to a short story. They were then asked some questions about the story and were required to respond. This was purely a listening task. The listening comprehension sub task generally assesses a range of language and cognitive skills such as attention, vocabulary knowledge, comprehension strategies, processing of oral language and generation of appropriate replies. Results on this subtask showed that learners did well with an average score of 1.66 correct responses out of a possible 3 expected answers. This represents 87.4% achievement among all tested learners across all the provinces. A test of correlation revealed a very weak result of (r = 0.192) between oral passage reading and listening comprehension.

English Vocabulary

The English vocabulary subtask measures learners' ability to understand Basic English words and follow instructions. The first subtask under English Vocabulary involved the learner showing body parts that were mentioned in the English language. The second subtask required learners to show items/objects that were mentioned by the assessor, while in the third subtask, learners performed Psychomotor activity of placing items/objects following instructions spoken in English "on the paper; next to the paper; behind you; under the paper; in front of you; to the right of you."

This task was meant to see whether learners in early grade acquire basic vocabulary in English. The mean scores for each province in table 5 shows learners from Luapula Province performing better than other provinces with average score of (9.05) correct responses out of a possible 20 English word test. Across all the provinces, there was an average of 6.09 correct responses with the least performing province under this subtask being Western with an average of 4.30 correct responses. Relatively high performance was noticed on this task. Such performance could be attributed to the nature of the English words selected.

Naming body parts in English is common even among illiterate people, while the second utilized familiar objects such as pencil, shoes, desk, rubber and paper used by pupils as they start school, and floor is common word to pupils because they are always told in English by the teachers to sweep the floor. Similarly, the third subtask is usually taught in early grade and children play games using such vocabulary.

Orientation to Print

This subtask was derived from Marie Clay's (1993) concepts about print assessments. The three items are: 1) Where the learner would begin reading; 2) Which direction the learner would read; 3) When the learner gets to the end of the line- where would s\he begin to read from. Print awareness however appears to have little ability to predict later reading skills (Paris & Paris, 2006). From table 5, the majority of learners successfully completed the task given with average score of **1.96** correct responses out of possible 3 correct answers. North-Western Province learners scored the highest average (2.64) correct responses out of possible 3 correct answers. The worst performing province was Western with an average of 1.01 correct responses. Generally, analysis showed that these subtasks (listening comprehension, English Vocabulary & Orientation to Print) are less problematic to many learners as evidenced by relatively high achievement rates of 87.4%, 74.9% and 74.7% who got correct responses on the respective tasks. These results further indicate that learners have some basic skills upon which core reading skills can be developed if teaching and learning processes are reformed towards learner outcomes.

3.1.2. Scores by Test Language:

Research comparing reading acquisition in 13 European languages provides evidence in support of the assertion that the regularity or complexity of a language affects the speed of acquisition of foundational reading skills - (Seymour *et al*, 2003). While many factors affect education quality, the language of classroom instruction fundamentally impacts whether a child is able to read and learn. This is because learning in one's first language is "essential for the initial teaching of reading" (*Dutcher and Tucker, 1997, p. 36*). Yet, an estimated 221 million school-age children speak languages not used as their primary medium of instruction in the formal school system (*Dutcher, 2004*), creating significant obstacles for teaching and learning (*Pinnock, 2009*).

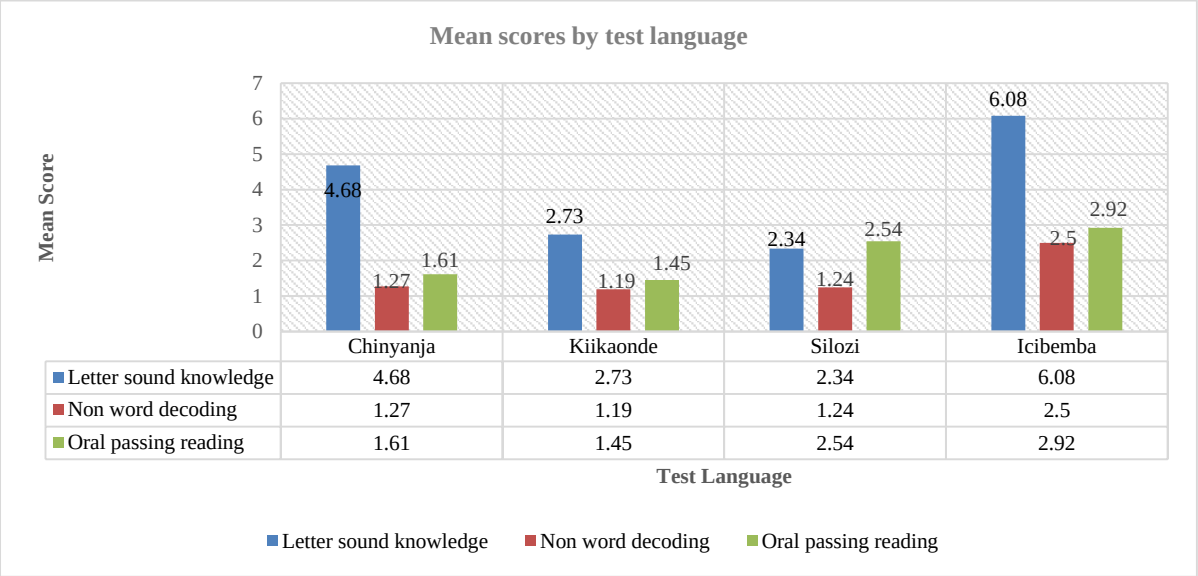
These children arrive on the first day of school with thousands of oral vocabulary words and considerable phonemic awareness in their mother tongue, but are unable to use and build upon their skills. Dismissing this prior knowledge, and trying to teach children to read in a language they are not accustomed to hearing or speaking, makes the teaching of reading difficult, especially in under-resourced schools in developing countries. As a result, many students repeat or drop out of school, while those who stay in school lack basic literacy skills and have not mastered content knowledge.

From the survey, 69.7% were using the local language all the time for learning instructions while, 0.8% hardly ever used the local language for instructional purposes. Consistent with the finding of the 2008 National Assessment Report, the learning achievement levels still remain low in the country across all provinces. In figure 2 below, Icibemba had the highest mean test scores across the three subtasks while Silozi and Kiikaonde recorded the least respectively. The respective scores in letter sounds were Icibemba (6.076), Chinyanja (4.67), Kiikaonde (2.73) and Silozi (2.34.).

Consultations with MESVTEE officials showed that Icibemba language has higher scores across all subtasks due to its dominance and due to relative uniformity of the language in the three provinces where tests were conducted. Since Icibemba is widely spoken, it is expected that children whose parents have migrated to these provinces quickly learn the language, thereby empowering them with basic languages skills critical for learning literacy at school. In addition, the high scores in Luapula Province contributed to the overall scores for the Icibemba language.

Statistical analysis showed that there was a statistically significant relationship between language of instruction at school and the language spoken at home with a p-value ($p=0.005$). This relationship was only verified in the first three subtasks thus; Letter sound knowledge**,** ($p<0.001$), non-word decoding ($p<0.001$) and oral passage reading ($p<0.001$). These relationships may explain why scores in one subtask affect learners' ability to perform in another subtask. In other words, a low score in one subtask means a low score in another and vice versa. The inter-linkages may also explain the understanding that these subtasks constitute the most important foundational reading skills and once mastered learners will have little or no difficulty developing the other skills.

Figure 2 Mean score by test Language



With regard to the effect of familiar language, baseline results further show that students whose home language is the same as official language of instruction at school perform twice as good as those that use a different language at home. For example, in oral passage reading, the mean score for the former is 2.29 correct words per minute compared to the latter's 1.13. The observed differences were statistically significant with a Chi-Square=P<0.01 while regression analysis showed R2=8.9%. This means that language spoken at home accounts for about 9% of all variations in a student's performance. Ironically, children that use English at home scored higher than any other child's familiar language, with an oral passage reading score of 5.11 which is way above the average of 2.13 across all four test languages. Possible factors include the fact that they may have more supportive parents. Similarly, there is likelihood that these children went through pre-school where there is emphasis on phonics (letter sounds) which means that they have already learnt how to decode words regardless of the language they are tested in.

It is possible that the higher scores are due to the fact that home and school language match, as noted in the analysis for Luapula and Northern provinces where Icibemba is spoken and used both as home and school language. Exposure to the same language outside of school may facilitate easier reading, or perhaps, it is helping learners to know slightly more words by sight. The differences due to testing language were statistically significant for all three tests (P-Value less than 0.01). This goes to show that language spoken at home has a profound effect on the child's ability to learn. As expected, grade 3 learners showed a higher mean score in all the three sub tasks. With respect to gender, boys in both grades 2 & 3 showed generally a higher score than girls. This is despite efforts to increase gender equality in education over the past 15 years.

Further, baseline results indicate that 'urban' districts have lower mean scores compared to districts that are typically rural. *See Annex 1a* for details. This may imply that because urban districts are more multilingual, students get affected with inconsistencies in language use and are therefore more likely to score lower than those whose home language is the same as the official language at school. In short, what may be considered a familiar language to most children may not be familiar to some children in urban districts. This may have been the case for Solwezi district in North-Western Province where Mufumbwe district had higher mean scores in non-word decoding (1.24 vs. 0.94) and oral passage reading (1.58 vs. 1.02). However, when English vocabulary scores are analyzed, there was a sharp contrast, with Mufumbwe scoring much lower at 3.35 compared to Solwezi score of 7.51 correct responses out of a possible 20.

3.2. Teacher Performance

Teacher performance was evaluated in two parts; classroom observation of a literacy class in session and a one-on-one interview immediately after class observation. This approach is consistent with global literature which emphasizes that the classroom context exerts influence over learner development and educational achievement arising from teachers' direct contact and instruction on a daily basis. The classroom context becomes most evident through aspects of teacher education and development, teacher characteristics and attitudes, classroom characteristics (for example, class size, and teacher-to-learner ratio), instructional materials and technology, instructional strategies and activities, and assessment practices *(Mullis et al. 2009)*.

The 2008 Zambia's National Learning Achievement Assessment Survey further shows teacher characteristics account for 4.7% of the variation in pupil performance in urban areas and 4.3% in rural areas. This goes to show that teachers have a significant impact on children's ability to learn. Results on teacher performance in this survey are presented in two main clusters thus; classroom management practice and actual interview.

3.2.1. Teacher demographic Information

The baseline survey found that there were more female teachers (56.1%) compared to 43.9% males assigned to lower classes (grades 1-4). Regarding age, the average was 28 years while the oldest teacher was 54 years old. The median age was 30 years which meant that half of the teachers were aged 30 years and above, while the mode age was 36 years, meaning that most teachers were 36 years old. It should be noted that about 25% of all teachers interviewed did not state their age and this might have an effect on the computed results.

Baseline data further showed that teachers interviewed had been teaching for an average of 5.2 years. This level of experience might suggest that many teachers were sufficiently acquainted with required teaching and learning standards.

Data analysis also revealed that 75% of the teachers were college graduates, with 21.4% holding a secondary school qualification and the remainder (3.6%) indicated others who were untrained teachers (UTs). Their academic qualifications were spread as follows; ZATEC (81.6%), ZBEC (3.3%), ZPC (1.0%), Primary Diploma (9.1%), Primary Degree (1.0%) and other (4%).

3.2.2. Classroom Environment

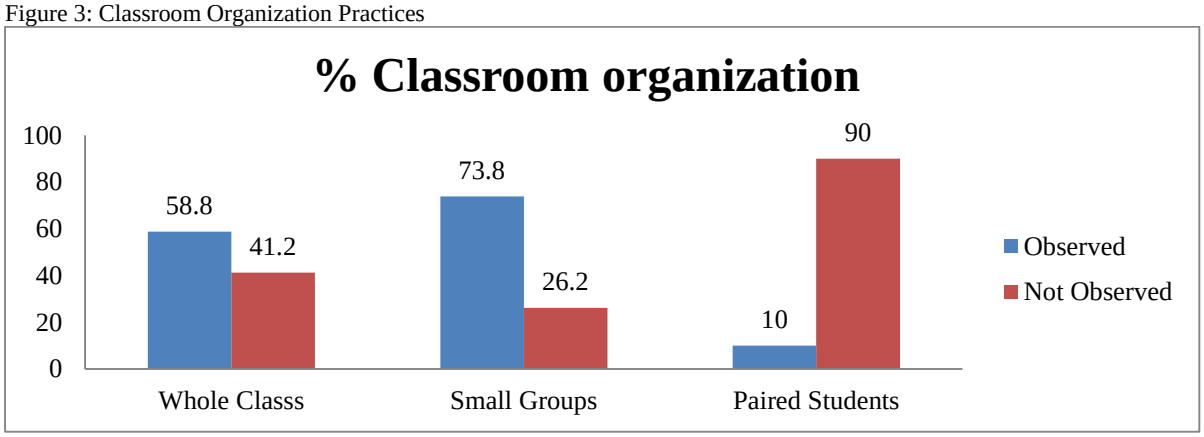
Baseline results showed that the classroom environment could be described as fair to good depending on the location of the school, distance from the central business districts of provincial towns and also depending on the creativity and dedication of both the head teacher and the teacher. For example, the baseline survey found that 97.9% of all classes observed had a black board and chalk, 87.9% had all children seated, 55.3% had children seated in cluster groups, 73.9% had enough room for group work, 72.5% had equal/no difference regarding students that mainly sit at the back, 83% could see writings on the black board while 84.7% of those at the back clearly heard what the teacher taught in front.

Other statistics show that more than half of the learners had exercise books/slates (75.8%) and pens/pencils (68.2%). Regarding teaching and learning aids, 54% of all classes had teaching aids but only 47.9% of them were considered appropriate by the assessors. Less than a third (28.3%) of observed classes had student work displayed. This low percentage of classes that displayed student work may be due to the fact that classrooms are shared with other grades. Even though some results are on the low end, in general, the above statistics indicate a moderately favorable environment of teaching and learning.

3.2.3. Classroom organization & Management

The following graph shows that teachers usually organize classes in small groups when teaching. It was also noted that the whole class approach is still common with over half (58.8%) of classes taught as whole class. Results show that the least practiced classroom organization technique was pairing students at 10%.

Figure 3: Classroom Organization Practices



Further baseline analysis shows that 92.8% of the interviewed teachers said it was their responsibility to take the class register for the observed class and 87.8% confirmed that they had an attendance register but about 2% could not produce evidence resulting into 85.4% of those who provided evidence. The percentage was lower when teachers were asked whether they took attendance on interview day as only 69.7% responded to the affirmative. Regarding teacher action when a student is absent for several days, results show that teachers mostly send notes to parents/guardians-72.2%, followed by informing head teachers-38.4%, asking classmates-32.2%, visiting the parents/guardians-31.8% and lastly informing the G&C teacher (10.1%). This finding is against the conventional reasoning where the G&C teacher may be regarded as one of the front line contact persons if a child is absent for many days. Since RTS works through an established learner support services structure where the G&C teacher is the focal person, the project expects that in future, the G&C teacher will be more consulted by other teachers if a child absconds for several days.

3.2.4. Instructional Content

With regard to teachers' practices about instructional content, *Table 6* below sheds more light. The scores are generally low on all the tasks below with only three of the tasks (pronounce letter sounds-56.3%, read sentences-56.3% and associate words with letters-52.6%) with a score above half while the bottom three are creating own stories (19.1%), speak about own lives (16.8%) and write words or sentences as dictated (31.4%).

Table 6 Teacher Practices on Instructional Content

Instructional Content Description	Observed or not observed?		Total
	Observed	Not observed	
Teacher guides students to Identify differences and similarities of sounds	42.6%	57.4%	100.0%
Teacher guides students to Pronounce sounds of letters	56.3%	43.7%	100.0%
Teacher guides students to Write letters	46.0%	54.0%	100.0%
Teacher guides students to Associate words with letters	52.6%	47.4%	100.0%
Teacher guides students to Discuss meaning of vocabulary words	41.1%	58.9%	100.0%
Teacher guides students to Blend letter-sounds to form syllables and words	41.5%	58.5%	100.0%
Teacher guides students to Read sentences	56.3%	43.7%	100.0%
Teacher guides students to Read printed material or book	45.1%	54.9%	100.0%
Teacher guides students to Answer questions or draw picture about meaning of text	47.2%	52.8%	100.0%
Teacher guides students to Write words or sentences as dictated	31.4%	68.6%	100.0%
Teacher guides students to Create or write own texts (sentence or story)	19.1%	80.9%	100.0%
Teacher guides students to Speak about own lives, events or stories	16.8%	83.2%	100.0%

3.2.5. Reading Knowledge and Time on Reading

Under this sub-section, baseline results show that 90.5% of all interviewed teachers have scheduled time for teaching reading which lasts 40-60 minutes on average. Further analysis showed that most of the scheduled reading lessons last for 60 minutes on a daily basis (64.7%) and 56.1% of the teachers said they have scheduled time for teaching reading 3-4 times per week. Regarding lesson plans, 81.6% of the teachers said they had a plan for reading lesson but only 74.0% produced evidence. When asked whether they had a plan for the class which was observed, 72.0% of teachers indicated yes but only 68.0% produced evidence. The authors noted that the inconsistencies in scores regarding what ought to be there and what exists may indicate natural behavior of individuals and weak internal monitoring by the school supervisors. It is clear from the results that when teachers were asked whether they have a lesson plan a higher score (81.6%) was recorded but when asked to produce evidence, the score reduced to 74%. For those who did not have lesson plan, the main reason for not having was because it was not given to them or it was lost. There were many other reasons given for not preparing a plan and the following were seen as repeating and therefore more common. They include inter alia; attending workshop, too much work, just took over from volunteer, shortage of stationery, was preparing for independence celebrations etc.

Regarding teachers' specific knowledge in how to teach sounds, baseline results show that relatively high scores on the letter sounds they were tested on. For example, 89.5% of the teachers knew the correct letter name for ***Ee*** but had reduced score (81.2%) on the letter sound. This may indicate that even though teachers know how to teach the alphabet, they have less knowledge on how to teach phonics or sounds. Their performance on identifying letters ***sh*** and ***mb*** was high at 91.1% and 75.7% respectively and 89.7% of teachers said that children need to learn sounds because they have to sound and/or decode letters in order for them to read words. Equally, 86.4% of the teachers know what a teacher centered approach is and 86.8% correctly explained it.

3.2.6. Class Activities

As illustrated in Table 7 below, baseline results indicates an array of activities with listening to a teacher reading aloud having the highest score of 82.8%, followed by answering teacher's questions (79.7%) and writing in exercise book (70.3%). Class activities with the least scores were paired reading (20.2%), working on group projects (23.7%) and playing learning games at 31.3%. These results are in tandem with those presented in classroom organization above where paired organization had the lowest score of 10%. The observed classroom activities reflect a dominant teacher centered approach where the teacher does most of the 'lecturing' while the learners regarded as information recipients without their active engagement in the teaching and learning.

Table 7: Teacher Performance on Classroom Activities

Description of class activity	Observed	Not observed	Total
Most students are Listening to teacher read out loud	82.8%	17.2%	100.0%
Most students are Reading out loud together (choral reading)	69.6%	30.4%	100.0%
Most students are Reading out loud to another student (paired reading)	20.2%	79.8%	100.0%
Most students are Reading independently (by him/herself)	43.2%	56.8%	100.0%
Most students are Repeating/Recitation	66.2%	33.8%	100.0%
Most students are Answering teacher's questions	79.7%	20.3%	100.0%
Most students are Writing on blackboard (by students)	50.4%	49.6%	100.0%
Most students are Writing on paper, in exercise book or slate (by students)	70.3%	29.7%	100.0%
Most students are Working on group projects (by students)	23.7%	76.3%	100.0%
Most students are Playing learning games, sketches or songs organized by teacher	31.3%	68.7%	100.0%

3.2.7. Teaching Methods

Regarding teaching methods, assessors during the survey observed that teachers introduce lessons by explaining what students will learn (84.8%), teachers conduct lessons in a local language (84.8%), reading aloud to students (82.5%), demonstrates reading and writing skills (69.0%), asks students questions (74.6%), responds to students' questions (33.0%), provides an explanation if students do not understand (68.8%), gives class work for students to practice (81.6%), concludes lessons with summary of what was learned (62.5%) and praises or compliments students (75.1%). Sadly, assessors also observed that 16.2% of all teachers in the survey criticize and scold students while 10.7% beat up students during class and 26.2% reported that they punish children in comparison to 55.9% who chose to discipline a student by discussing. When compared, survey results show that teachers ask more questions than students do i.e. 74.6% vs. 33.0%. These scores mean that more than half the time, teachers do more talking than their students. This result may be reflection of the teacher teaching with less student involvement.

Similar to results in classroom observation, the teacher interview results also show that a teacher centered approach where teachers score high on questions that relate to their knowledge and low on questions which relate to student involvement. For example, 80.6% of teachers said that they read stories to students daily and weekly compared to 55% who said that their students read a story aloud in class. Additionally, only 58% of the teachers said they listen to each individual student to read out aloud in class. The results show that the commonest frequency of teaching reading is daily (42%) and weekly (25%) while the frequency for specifically teaching phonics is 53% daily and 27.2% weekly.

Table 8: *How do you get children to manipulate letters of the alphabet?*

Manipulation Type	Percent
Arrange letter or word tiles	26.5%
Write letter to match sounds	31.4%
Play word-sound games	15.6%
Rhyme	12.1%
Other	14.3%
Total	100.0%

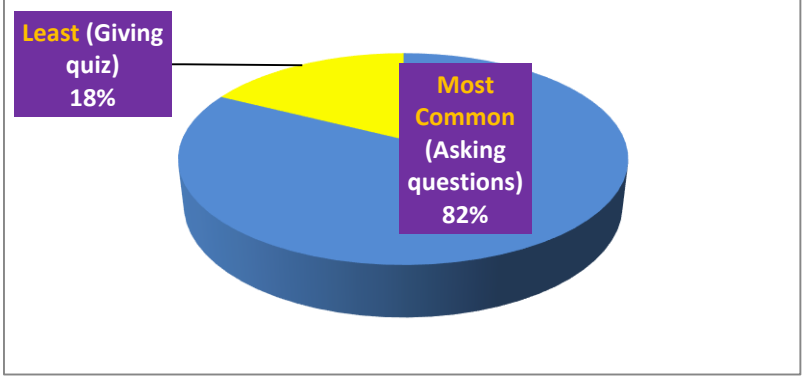
The commonest method used to teach reading is sounding out words (34%), followed by reciting words (19.4%), reading as a group or pair (18.6%), other (11.3%), teacher reading to students (7.0%) and lastly is memorizing (5.6%). Regarding children that had trouble reading, a quarter (25.3%) of the teachers said they know that a child has trouble reading when he/she cannot sound out words and 20% said they knew if the child was not able to make letter sounds. Other ways of knowing include; if the child could string words to make a sentence, skips words, cannot answer questions, and does not participate in class and others. Please see Annex 1c for details. According to the teachers, the solutions for the children having trouble reading lies in giving extra assignments (37.4%), work with student one-on-one (33.9%) and option number three is to pair them with a good student (13%). With respect to using active learning technique, 64.7% of the teachers reported that they use this technique frequently and 26% uses it sometimes compare to 8% who said they had never used it and 3.1% who hardly use it.

Among those who used active learning techniques, results show that other than the day of observation, under half (48.2%) of them used it in the week preceding the interview. Overall, about 64% have used active learning technique in the month preceding interview date and close to three quarters (73.8%) of all interviewed teachers correctly described active learning techniques. Even though the majority teachers were able to describe active learning techniques, a whole sum analysis of teacher practices fairly demonstrates that many teachers do not actively engage students when teaching as is evidenced by inconsistencies of what they ought to be doing and what they actually did.

3.2.8. Assessment Practices

Literature indicates that systematic assessments lead to improved performance. For example, the 2008 National Assessment Survey Report showed that pupils in classes where teachers used various methods of assessing learners during the lessons, such as field work, project, demonstration, discussion, games, role plays, drama and research tended to perform better in English and Life skills.

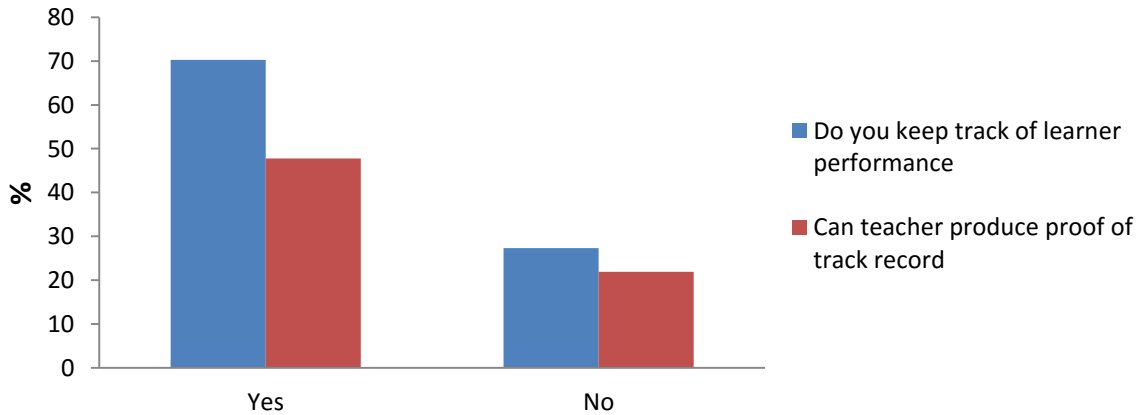
Figure 4: Comparison of Most and Least commonly used Assessment Technique



In this survey, results show that teachers mostly assess students by asking questions. *See Figure 4* below. Further analysis showed that there is a tilt towards more informal classroom based assessment practices than the formalized and more verifiable school based assessment techniques. As highlighted in Figure 4, 81.5% of the teachers assess by asking questions, 75.8% assess by monitoring students as they work, 69.7% assess by observing, 58.8% assess by listening to individual students read while only 23.4% and 17.8% of observed teachers assesses students by using reading assessment tool and giving quiz respectively. This performance reflects a weak institutionalized assessment practice system which promotes systematic recording. It further may imply that the MESVTEE's National Educational (1998) policy requirement where schools are expected to "develop clear schedules of performance monitoring activities that check pupil progress" has not been institutionalized fully.

When asked whether teachers keep track of students' progress in learning to read, 70.3% said yes compared to 27.3% who said they did not. Among those who said that they keep track of student performance, only 47.8% produced proof. *See figure 5* below for details. Further, the results show that most teachers track student performance on monthly basis (35.9%) followed by weekly assessments at 17.7% daily assessments 9.3% and termly assessments at 5.6%. The analysis also shows that teachers keep more records on structured assessments (60%) than on informal student assessments (48%). For the teachers who fail to keep records, they gave many reasons and among them are; work overload, class is too big, I am a volunteer, I was ignorant about it, I am a new teacher, there are no materials, it's not yet time for assessment-done monthly, too many workshops, not my class and other reasons. Authors noted that giving such excuses for not recording assessment results exposes the much talked about weak internal controls and monitoring support system by the school authority, and MESVTEE staff and non-involvement of parents in the performance of their children.

Figure 5: Learner Performance record keeping vs. teachers ' claims



With regards to sources of assessment criteria, majority (30.5%) of the teachers develop their own while 28.9% and 17.9% get assessment criteria from MESVTEE and specific reading programs respectively. The least source of assessment criteria was the school head teacher at 4.2%. When asked if the school had a learner performance assessment plan, 42.3% responded affirmative and 40.8% readily described it.

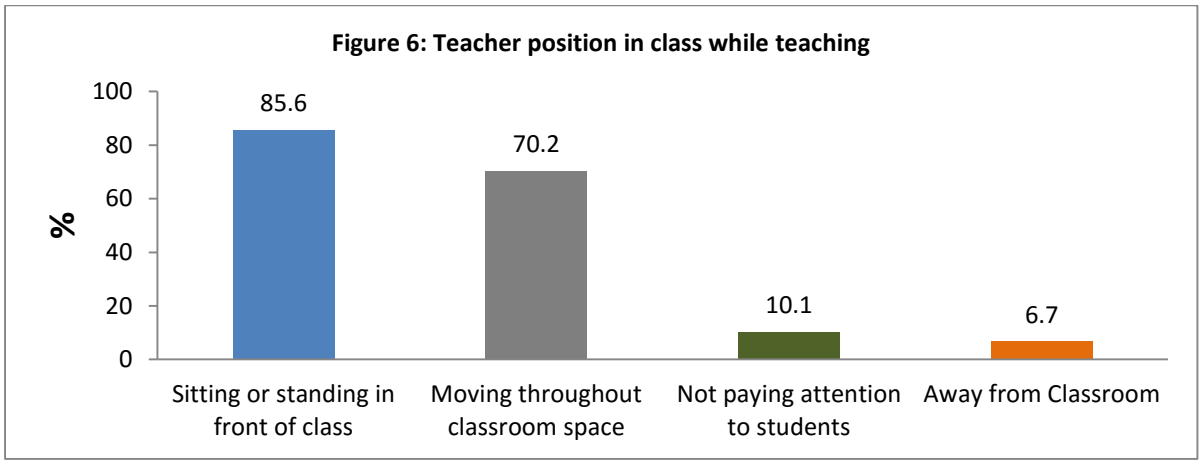
3.2.9. Teaching and Learning Materials

According to survey results, teachers use the following resources to teach: black board (90.6%), textbook teaching (69.7%), and student exercise books/slates while the least used or available resources were supplementary reading resources (24.2%), manipulatives /real objects (17.4%) and work sheets (16.1%). Baseline results also indicate that 79% of the teachers make their own teaching-learning aids and against 72.6% who were able to show examples of what they had made. This finding is consistent with results in other subsections of this report and it continues to show that there is a gap between what teachers say they do against what actually exists on the ground.

Data also show that there is an association between teaching-learning materials used in class and what teachers actually make or improvise to aid teaching. Teachers mostly use posters/charts/pictures (23.5%), and flashcards (21%) and these same two types of teaching-learning aids accounted for high scores in self-made materials with 39.1% for posters/charts/pictures and 36.5% for flashcards. For teachers who did not make own teaching-learning materials, the major reason for not doing it was lack of materials (36.1%) and other reasons (17.5%). The combined score for don't know, takes too much time and not effective only accounts for about 10.1% prompting authors to suggest that these factors may not have significant bearing on teachers' failure to produce their own teaching-learning aids.

3.2.10. Teacher Position

Teacher position and movement in class is cardinal for capturing learner attention and adding life to the lesson. NBTL methodology requires teachers to attend to few learners at a time while seated at the teaching corner. The teacher for a period of time focuses attention on the group seated at the teaching corner. The rest of the pupils are given either individual or group tasks. As the lesson begin, the teacher stand in front to give instructions on what to be done to the whole class. The problem noted with this approach is that; as the teacher concentrates on the smaller group at the teaching corner; other learners remain unsupervised and may focus attention on irrelevant and unrelated material to what the teacher wants them to learn. See Figure 6 below for details.



3.2.11. Teacher Monitoring and Support

As part of ensuring quality in teaching and learning, teacher monitoring and support cannot be overemphasized. In this survey, 81% of the teachers received guidance from the school head teacher to help them teach more effectively. With regards to who mostly observes teachers, 51% indicated head teachers compared to 17.1% who said a peer (fellow teacher). Others are Zone education officer 9.7%, DEBS 9.4% and others (deputy head & senior teacher) 12.7%. In addition, 60.8% teachers had their lessons observed in a school year and all of them held discussions with observers at the end of the observation which 82.5% said feedback was useful. Results also show that teachers are frequently observed by the school administration on a monthly basis, representing 40% while termly observations constitute only 9.1%.

A cross-check analysis on this practice has similar results where high scores clustered around termly (22.5%), yearly (19.2%) and monthly at 11.5%. From the authors' point of view, the above results show a relatively good supportive environment where a teacher should be able to thrive and to a large extent impact positively on learners' performance achievement.

3.2.12. Teacher CPD

There is no doubt that strong CPD practices promote an atmosphere where effective teaching and learning takes place. Results of this survey show that 61% of the teachers had received professional training on how to teach reading using phonics or letter sounds. This score is consistent with results in other sections of this report where teachers have considerably good knowledge on teaching methods but rarely translate to improved learner achievements. The survey showed that 83.9% of the teachers reported that they hold teacher group meetings (TGMs) on a weekly (35.7%) basis and 46% of them also said there had been scheduled time for teachers to exchange ideas, share materials/plan lessons together in the last four weeks.

The TGMs are mostly organized by school based officials (47.3%) who include School In-service Coordinators (SICs), Deputy Heads and Senior Teachers. Other organizers are head teacher (21.3%), school teacher (27.1%) and Zone or district official (4.4%).

Baseline results show that SICs and school based officials are doing their function of organizing CPDs. The results also reveal that in some cases head teachers support the ZIC and the SIC through getting involved in organizing Zone and school based CPD. During TGMs, discussions center on teaching methods (33.2%), subject content (22.5%), classroom management (15.4%) and the least topic was administrative issues (1.0%).

Teachers think that TGMs are helpful because they help them learn teaching methods (31.1%), give them a chance to learn from each other (22.7%) and helps to discuss problems they face in teaching (20.7%). For those who never attended TGMs at the zone center, they cited reasons such as not held at school (36%) and other (51%) which includes: SIC always attends, never invited, understaffed, I do not know, I am still new and apparently, authors noted that many teachers said they were new and they did not know they should be attending TGMs at zone center. This finding may point to the fact that new teachers might have not understood the in-service structure where the SIC represents the school often at the Zone meetings and later orient all the teachers in the school during TGM. Other teachers attend zone meetings mainly during GRACE. It could have also been that the new teachers might have been in the school only for one term and had not been invited for zone meetings yet that are usually held during the holidays.

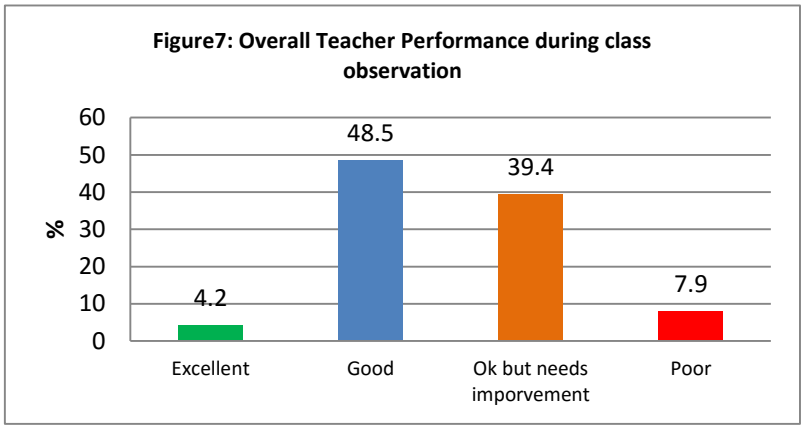
3.2.13. Teacher interaction with Parents

The survey results reveal that there is a fair amount of interaction between teachers and parents as evidenced by 81.4% of the teachers who reported that they meet parents to discuss students' performance on termly basis (39.8%) compared to 18.4% and 7.2% for monthly and weekly meetings respectively. Just like in other sections of this report, there was a lower percentage on a question that hinges on practice when teachers were asked whether they prepare student progress reports with only 61.2% responded affirmatively.

Over half (55.3%) of the teachers said they mostly send progress reports on termly basis and 55.9% reported that parents ask to meet with individual teachers equally on termly basis. With respect to whom to consult when a student has a problem, 51.6% of the teachers indicated head teachers followed by other (senior teachers/PTA/Deputy Head) at 18.4% , G&C teacher (17.9%) while fellow teacher at 12.1%.

3.2.14. Observer Reflections

After lesson observations, assessors were required to give their overall impressions of the lesson through a series of questions. The results show that 53.2% of teachers taught the same lesson as indicated in the lesson plan and 51.7% handled classroom activities and discussion followed the lesson/script. Equally, assessors noted that over half (55.6%) of teachers had adequately prepared teaching and learning aids and/or supplementary materials and were ready for the lesson. On language, teachers taught in local language all the time (69.7%), most of the time (16.3%), not at all (1.9%) and some time (8.3%). In slight departure from results presented in preceding sections, assessors thought that 80.5% of teachers used some interactive learning techniques. Other results show that teachers focused on all students 49.2%, most students 36.4%, a few students 10.4% and students were engaged in the lesson and class activities all the time (45.3%), most of the time (40.5%) and some of the time (9.7%). Results also indicate that teachers made efforts during class to vary methods (35.7%), provide individual assistance (27.3%), seating students in optimal spots (22.7%) and assigning other students to help (8.2%). With regards to gender equity in class, results show that 35.3% of teachers gave equal chances to answers questions while 29.4% asked questions equally and 19.3% gave equal opportunities to participate in class activities compared to 15.9% teachers that gave equal access to learning materials.



Further analysis revealed that 65% teachers lectured between 25-74% of their time, 31% engaged students in group activities between 50-74% of the time and 32.6% allowed students to read individually between 1-24% of the time. Overall, teacher performance in class was rated as good (48.5%). See figure 7 above for details.

3.3. Head Teacher Performance

In Zambia, head teachers are expected to have a minimum of two years of teacher training, according to Ministry of Education 2000 Report. Strong leadership by the Head Teacher in the day-to-day management and oversight of school programs is critical for creating an environment which supports improved learner performance. Further, literature proves that viewing student achievement as evidence of learning, and linking student learning to the effective (Berliner, 1987, 2005) teacher is one way of defining quality teaching. The survey sought to unearth critical data based on head teacher characteristics such as duration and type of training, exposure to education management training (EMT) and other factors. Therefore, with the aim of capturing issues on Head Teacher leadership, the survey interviewed Head Teachers on different aspects among them; general pedagogical leadership, pedagogical leadership with a focus on reading, school management, guidance and counseling, continuous professional development, community support, and external monitoring support from provincial and district officials.

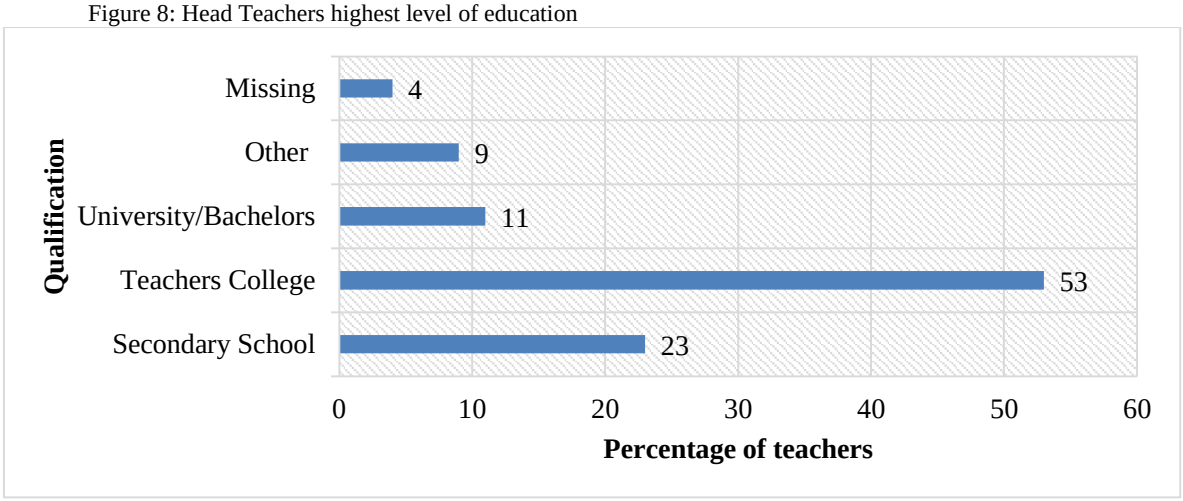
3.3.1. Head Teacher Demographic Information

In RTS target schools, the typical dominant sex of a head teacher is male (75.6%) compared to female (24.4%). This highlights some gender issues particularly in relation to decision making processes at school. This result shows that despite having more female teachers (56% vs. 44%) in lower grades (1-4), they hardly count for the top job in a school. The average age of the head teacher is 43.8 years with

youngest being 25 years, oldest being 54 years and median age is 44 years, which means that half of the head teachers are 44 years and above.

Survey results reveal that the average years of experience of being a head teacher were 3.5 compared to 18.47 years of teaching experience with about 19% head teachers that currently teach lower grades and out of which 5% currently teach grade classes. With respect to which subjects are taught by head teachers, results show that 46% teach all subjects which may indicate substantial involvement in classroom activities. Regarding highest level of education completed, 53% head teachers completed a teachers college, 23% secondary education, 11% with bachelor's degree. See figure 8 below for details. On specific teaching qualifications, the survey results show that 32% head teachers have a primary diploma, 24.3% have other qualifications, 23% have ZPC and 9.9% each for ZBEC and ZATEC. Further analysis shows only 27.9% have ever attended the NISTCOL ELM Diploma course for Head Teachers, 31.5% have never received training on their role and how to carry out duties as a head teacher.

Figure 8: Head Teachers highest level of education



In this survey, teacher qualification and experience are regarded as important variables in student performance. Studies on the effect of teacher experience on student learning have found a positive relationship between teacher effectiveness and their years of experience, but not always a significant or an entirely linear one (Kitgaard and Hall, 1974, Maurnane & Philips 1981). The teacher's qualification and impact on student achievement findings from TIMSS 2003, data in Israel Ruth Zuzovsky- evidence currently available suggests that while inexperienced teachers are less effective than more senior teachers, the benefit of experience appear to level off after a few years.

3.3.2. Focus on Reading

A quarter (25%) of head teachers agreed that reading is taught as a separate subject and about the same percentage said teachers mainly use official local language for grades 1-4. When asked how much of actual instruction is in the official local language, 39.6% said most, 28.9% said about half, 16.8% said all, 13.2% said some and 1.5% said none. There were more head teachers (31.1%) that think that the major reason why teachers do not use the official local language more often to teach reading is because they think English is required followed by do not have local language books or materials at 20.5% while do not speak the local language was ranked fourth at 13.9%.

Regarding their opinion about which class to begin teaching English, the following are the scores; grade 1 (31%.0%), grade 2 (39.6%), grade 3 (15.7%), grade 4 (5.6%) and others grades combined (8.1%). Further, 64.5% head teachers think that the majority of their grades 1-3 students perform average in reading while 22.3% think that learners perform poorly and 2.5% said they perform very poorly compared to 2.0% and 8.6% who said learners perform very well and good respectively. Similarly, over half (53.3%) of head teachers said they are partially satisfied with teachers' performance in teaching reading and 25.9% said they are not satisfied while only 4.1% indicate complete satisfaction. The survey results also indicate that head teachers form their opinions about grades 1-3 reading performance based

on the following: own observations 32.8%, reading test scores 25.1% and teacher feedback at 22.6%. Regarding teacher performance in reading, the same reasons ranked top with own observation still on top at 37.6% while teacher feedback ranked second at 22.2% and reading test scores third at 21.1%.

The top three teaching programs are NBTL (37.6%), ROC (27.9%) and SITE (27.7%) and common methods of teaching reading in grades 1-3 are; students sound out words (56.4%), students recite words (15.6%) and teachers read to students (14.8%). Most head teachers (97.5%) said that the reason why teachers should teach letter sounds to children is because learners need to sound out letters to read a word. Regarding how head teachers rate their own knowledge about how to teach early grade reading only 10.2% rated themselves as excellent with 48.7% saying they are pretty good while 34.0% rated themselves as average. It was also noted that some head teachers rated their knowledge in early grade reading as not so good (5.6%) and very weak (1.5%). The head teachers who rated their knowledge in early grade reading as not so good could be those heads who originally trained as secondary school teachers with subject specialization in other subjects apart from languages but based on their diploma, they were promoted to head basic schools and concentrated more on the upper basic (grade 8 and 9).

When the two bottom scores are combined and put into perspective, it means that about 14 schools have weak leadership in regard to teaching early grade reading out of the 197 schools in the survey. Since the average class size is 55, it may mean that 770 learners from the 14 schools are extremely disadvantaged by the school leadership's poor knowledge in how to teach reading. From the survey, it was established that head teachers take the following top three steps to help teachers improve reading instruction; discuss early grade reading in teacher meetings (34.8%), observe reading lessons (20.6%) and provide materials (16.8%) with the least or rarest being pairing some teachers with a good teacher.

3.3.3. Pedagogical Leadership, School Management and Improvement

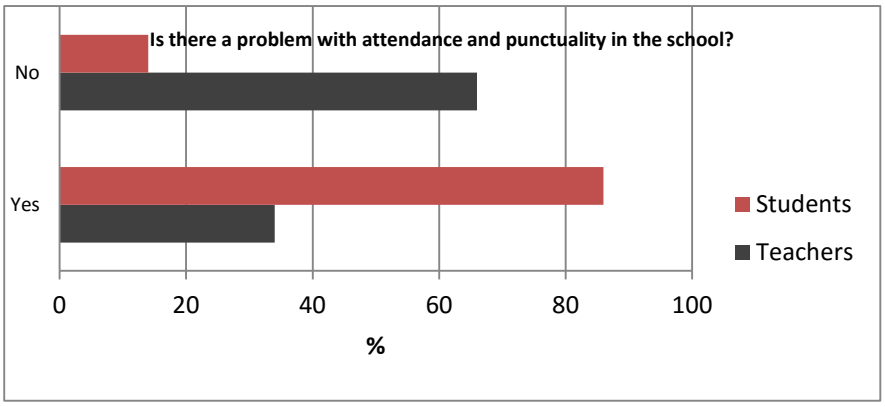
On pedagogical leadership, almost all head teachers (99.5%) agreed that it is their responsibility to help teachers teach better in schools and they pointed out that the three most important duties of head teachers were: ensure quality teaching (41.5%), ensure student learning (26.4%) and implement MESVTEE policy (20.8%) while least ranked is fundraising at 1.8%. With regard to leadership style, many head teachers exercise pedagogical leadership by communicating often with teachers (24.1%), encourage team work among teachers (23.9%) and share my knowledge with teachers (19.4%). The top three strategies on how head teachers assess quality of teaching were classroom observation (29.6%), student marks/test results (23.3%) and teacher performance reviews at 16.2%. This result was consistent with those on how head teachers identify teachers that need help with classroom observation ranking top, followed by teacher performance reviews and then student marks. Similarly, if a teacher has a problem, a head teacher mostly discusses the problem area in teacher meetings (23.8%), observes teachers' class (20%) and sometimes pairs them with a good teacher (16.5%).

Teacher meetings and classroom observation were cited as common ways of discussing and resolving challenges associated with learning and teaching in schools. For example, 29.7% of head teachers said they organized discussion meetings for teachers in each academic year and on average, a head teacher observes a classroom teacher 5 times in one academic year. However, when asked for proof of notes or other documentation during a lesson observation, almost a quarter (18.8%) of head teachers could not provide evidence. On feedback, the survey found that 60% of head teachers provided one-on-one feedback with 30.9% through a written report and group discussion at 7.6%. Even though 98% of head teachers said that teachers are required to prepare daily lesson plans, this practice is not the same when it comes to preparing individualized teacher improvement plans as only 47.2% indicated it is happening.

The survey also found that 30% of head teachers get to know that students are progressing through classroom observations 26.7% and 20.2% through reviewing student work and teacher reports respectively. Regarding motivation, 39.8% of head teachers motivate students by providing rewards/resources while 30% give positive feedback or praises and 11.8% talk to parents.

School management showed in varied ways and was entrenched in a head teacher's leadership style. For example, 9.1% of the head teachers said they do not discipline teachers for unexcused absences or lateness compared to 90.9% who said they do. Equally Figure 9 below shows great variations of head teachers' perception towards teachers and students' attendance and punctuality where over 80% of head teachers think that there is a problem with student's attendance compared to just above 30% for the teachers.

Figure 9: Head Teachers' perception on teachers & student's attendance/punctuality



Concerning strategies of dealing with the above situation, head teachers mostly deal with teachers through giving warning (51.4%), recording the incident (30.1%) and by reporting to zone or district authorities (7.2%). For students, head teachers learn that there is a problem with attendance by reviewing records (38.9%), by observing (36.6%) and they are also informed by teachers (18.6%). Based on this information, head teachers address the situation by instituting the following measures; talk to student directly (25.7%), notify parent/guardian directly (24.5%) and meet with parents/guardians as top three strategies.

In similar fashion with other results in sections above, more head teachers (89.1%) agreed that the school has goals or targets for learner performance but only 73.3% were able to show proof. Table 9 right shows that there was little involvement of PTA in setting learner performance targets as reflected by only 13% where head teachers had worked together with PTA to set learner performance targets. The survey results also show that schools come up with their own plans based on their own needs (67.7%) while some school plans are based on the district strategic plan (32.3%). From these results, authors think that school improvement plans are not systematically developed and followed. Further, there was no evidence that schools are held accountable based on a school plan and the role of PTA in school improvement especially learner performance is not clearly delineated.

Table 9: How are targets chosen

Head teacher alone	2.1%
Head teacher and teacher	77.1%
Head teacher and PTA	13.0%
Higher education authorities	2.1%
Other	5.7%
Total	**100.0%**

3.3.4. Continuing Professional Development (CPD) and External Monitoring & Support

As noted in head teacher information section above, despite having gone through formal training in how to teach reading using phonics (81.7%), many head teachers have not had hands-on training in Education Leadership and Management (ELM) especially in relation to duties of a head teacher. For example, less than a third (27.9%) of all head teachers in RTS target schools have attended the ELM course at NISTCOL while only about 31.5% had training in their role and how to carry out their duties as head teachers. Survey results show that on average, a head teacher attends 2 zonal CPD activities in a school year which they mostly attend in each term.

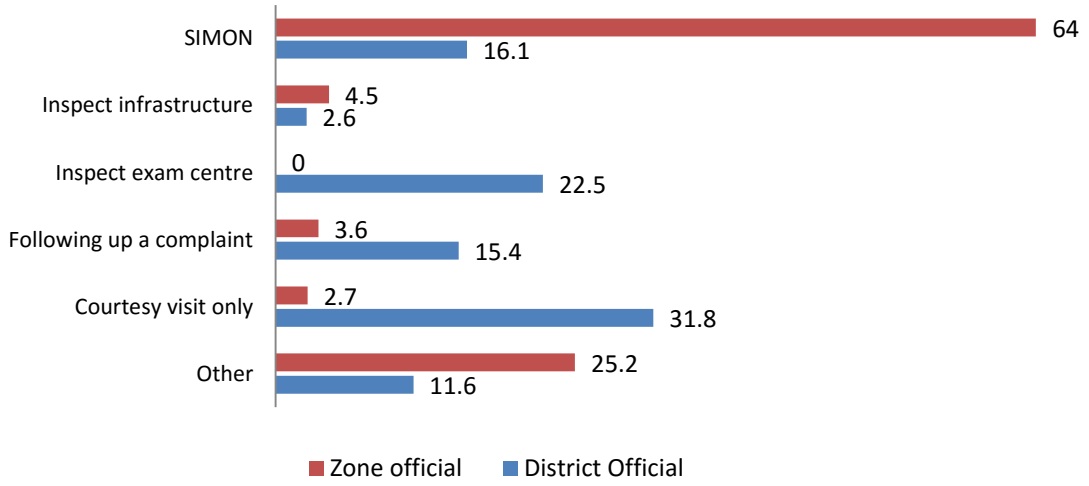
It should be noted that 23.2% of head teachers do not attend zonal CPD activities at all which may imply that about ¼ of head teachers do not participate in CPD activities.

This should raise concern among district officials if CPD is regarded as a key mechanism of improving school effectiveness. Over half (52.7%) of the head teachers in RTS targeted schools described zonal CPD as helpful to a large extent while 23.1% and 20.1% respectively said CPD are completely helpful and helpful to some extent. The top three reasons why head teachers think CPD are helpful were: learn about new teaching methods (34.9%), learn about management methods (19.8%) and chance to learn from other head teachers at 18.6%. In relation to other teachers attending CPD, 25.8% of head teachers indicated that other teachers do not attend CPD activities.

On external visits and support, baseline results show that each school in RTS targeted provinces is on average visited 3 times by district or provincial officials in a school year compared to 2 visits from a zone official. This may imply at least a visit to a school in each term. According to results, the visits were rated as very useful (86.7%), somewhat useful (12.1%) and unhelpful (1.2%) and 94.4% of all head teachers agreed that the visits contributed to improving quality of teaching and learning compared to 5.6% who said they did not.

The graph below shows that zone officials do more school in-service monitoring (SIMON) than district and provincial officials. This result shows a sharp difference between district/provincial and zone officials' performance in SIMON which may be indicative of inadequate focus on teaching and learning quality that leads to poor learner performance in schools. Conversely, district and provincial officials conduct more courtesy visits and exam centre inspections than zone officials, clearly reflecting on officials' focus during monitoring support visits. When asked about whom they consult when they have teaching-learning problem at the school, 37.2% of head teachers said zonal head teacher/ZIC followed by teacher at my school (25.1%), then district official (17.2%) and another head teacher at 15.5%.

Figure10: Purpose of visits to schools by district and zone officials



Overall, authors of this baseline report believe that results show a fairly good CPD culture especially that there is reliance on learning from each other as is evidenced by large amount of consultation from the ZICs, other head teachers and other teachers within the school. In service meetings are a regular occurrence in many schools and data point to the fact that head teachers support each other at zone level. To strengthen existing practices, RTS needs to work towards improving the quality of Teacher Group Meetings (TGMs) and Head teacher In-service Meetings (HIMs), etc. On the other hand, support from district officials seems inadequate as only 48.7% of head teachers confirmed receiving support from MESVTEE towards improving the quality of instruction and student learning at the school. This is inspite of a fairly good number of support visits to schools (3 visits on average in a school year translated as one visit per school per term).

3.3.5. Guidance and Counseling and Community Support

Guidance and Counseling (G&C) is important for a child's wellbeing. By definition, "it is the process by which students are given life skills on how to deal with emotional conflicts and personal problems both in school and how to incorporate the same in their daily life"[2]. For RTS G&C is important because it helps learners effectively deal with factors in the environment which may be affecting their concentration at school. By promoting effective G&C in schools, RTS hopes to help learners focus on transformative learning and thereby improve learning achievements. During the baseline survey, key questions were asked to head teachers on the types/services offered in schools and some summary results are presented in the following sub-sections.

The survey results show that most (84.5%) of all schools in RTS provinces have a teacher specifically assigned to handle G&C activities in the school and 97.5% of these G&C teachers also have classroom teaching responsibilities. However, only 33.3% of G&C teachers are specifically trained in guidance and counseling. Of those schools without G&C teacher, 87.5% provide guidance and counseling. Students and parents/guardians get to know that G&C services exist in a school through PTA meetings (26.6%), announcements to student body (26.3%), G&C teacher contacts individual students and parents/guardians (20.9%), teachers inform students (14.9%), sent written notification to households while 1.7% is through other means and 0.9% said they don't know. The G&C services outlined in Table 10 below targets students groups such as students with behavioral problems (16.9%), girls (15.1%), orphans (12.9%), students at risk of dropping out (12.5%), weak students (12.2%), students with difficult home situations (11.5%), children affected by HIV/AIDS (9.5%), good students (7%) and other groups of students (2.4%).

From these results, it is clear that students deemed as good students receive less G&C services compared to those considered as weak students. RTS will work towards promoting G&C services for all students regardless of the sub-group.

Table 10: Types of G&C services provided at school visa-a-vise those uniquely offered to girls

Type of service	%	Program or service offered to girls	%
Career counseling	16.2	Career counseling	2.1
Personal counseling	25.4	Personal counseling	30.1
Life skills education	18.8	Life skills education	18.9
HIV/AIDS prevention	22.6	HIV/AIDS prevention	22.9
Tutoring/ remediation	1.6	Tutoring/ remediation	1.1
Afterschool recreation/ clubs	5.2	Afterschool recreation/ clubs	5.5
Feeding program	2.3	Feeding program	1.7
Scholarship/ financial assistance	4.3	Scholarship/ financial assistance	3.2
Mentoring	3.0	Mentoring	3.4
Other	0.7	Other	1.3

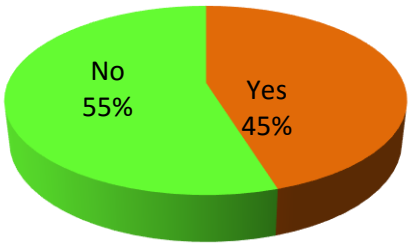
The above table highlights many similarities between type of G&C service provided for entire school and those services or programs specifically offered to girls. The only stark contrast is in career counseling where 16.2% of schools provide this service to all learners compared to only 2.1% provided to girls as a specific sub-group. This disparity may imply that less attention is attached to girls' career as is the case in many Zambian cultures. On specific programs offered to girls to prevent them from getting pregnant, the following responses were computed: personal counseling (37.6%), sex/reproductive health education (34.4%), mentoring (14.0%), parental education (11%) and other (3.0%).

In relation to the re-entry policy, almost all head teachers (98.9%) are aware about it and clearly explained that girls who get pregnant should be allowed back in school after they deliver. However, 1.1% of head teachers do not know about it. Out of 197 head teachers interviewed, at least 2 were not

[2] http://www.writing.wikinut.com/importance-of-guidance-and-counselling-in-schools./2j9-q09s/

aware about it and when this number is extrapolated to RTS targeted schools, at least 14 head teachers may not be aware about the re-entry policy. This may pose some concerns about their level of support to girls that fall pregnant.

Figure 11: In your opinion, is PTA or community support sufficient?

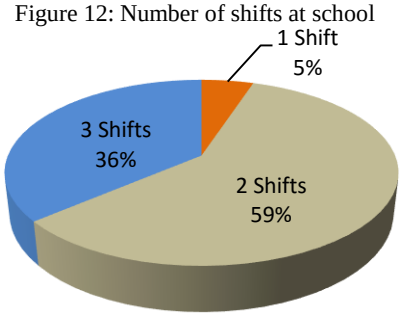


With regards to community support, RTS will promote strong School Community Partnerships (SCPs) so that there is substantial involvement of community members in school management. As literature highlights, the role of the community in improving learner performance and ensuring accountability cannot be overemphasized. *Postlethwaitie and Rose, (1992)* pointed out that, in many countries, the more the school head teacher and other teachers have contact with parents, the more effective the school was in promoting the reading achievement of pupils. This goes to show that parent-teacher interactions play an essential role in ensuring that there is strong parental and/or community involvement in a child's learning process. From the survey, 96.9% of head Teachers confirmed presence of a Parent-Teacher Association (PTA) at their schools compared to 3.1% who did not have. This result is rather surprising given that government policy demands that all schools should have a PTA. The plausible reason is that some PTAs could be so ineffective that they may be perceived as not being in existence. Further, survey results show that in schools with PTAs, meetings between school authorities and PTA mostly happen every term (44%), followed by monthly meetings at 38% while yearly meetings with 8.7%. Major discussion points centre on infrastructure/maintenance issues (36.3%), student learning (20.4%), fundraising and procurement (14.2%), school management (8.2%), instructional quality and student support both at 6.4% while personnel issues and other reasons account for 5.4% and 2.8% respectively. In an attempt to measure levels of collaboration between head teachers and PTAs, head teachers were asked to indicate whether they have jointly developed a school improvement plan and 87.4% responded in the affirmative. However, less than half (45.2%) of head teachers thought that PTA or community support was not sufficient to achieve the objectives of school improvement plans. *See Figure 11*. The reasons for their perception were insufficient funds (43.9%), little interest or commitment (38.6%), lack of knowledge (6.8%) inadequate manpower (6.1%) and other (4.5%).

3.4. General School Information

This section of the report presents general school information in the six provinces. This information is important for contextual understanding of factors that affect teaching and learning processes in the schools. For example, 82.7% of all schools are in Grade 3. This is a classification by MESVTEE based on the number of classrooms (average was 6 but with a high standard deviation of 4 - which means that there were 4 classrooms either below or above the mean score of 6 on average. In other words, a school can have only 2 classrooms on the lower end and as many as 10 classrooms on the other end). Further, 68.4% of schools end at grade 9 compared to 30.1% and 1.5% for grades 7 & 8 respectively[3]. On average, all schools in RTS target provinces run at least 2 shifts per day as given in *Figure 12* above. In a related finding, 7.1% of schools have multi-

Figure 12: Number of shifts at school



[3] It should be noted that this will change with the new policy which abolished basic schools

grade sessions with the most affected grades being grades 4, 5 & 6 at 20.8% each while grades 1 & 2 had 6.3% each compared to grade 3 & 7 with 12.5% each. In terms of distance, a school in RTS provinces is located 66 km from the DEBS office on average with minimum and maximum at 1 km and 265 km respectively. Further analysis revealed that not all schools can be accessed throughout the year as 11.2% of them reported accessibility problems at certain times of the year particularly in the rainy season. In addition, analysis of infrastructure at the school revealed the following: schools have electricity 10.9%, schools have running water 8.9%, schools have security wall fences 1.6, schools have play playground 59.9%, schools have library with books 7.6%, schools have a resource room 5.3% and schools have computer 5.9%. For toilets, the survey found that on average, there are 2 functional toilets for both girls and boys which may not be enough depending on school population particularly that the average class size is 55 students. The average number of toilets (two per each sex for the whole school) falls short of government policy standard toilet-pupil ratio[4] of 1:40 for boys and 1:25 for girls. All the above factors have an effect on time-on-task as well as student learning.

With respect to other NGO activities, the survey found that 55.5% of schools receive some sort of support spread as follows: water and sanitation 19.1%, Health/HIV-AIDS 12.3%, feeding/nutrition 13.4%, scholarships/incentives 9.7%, teacher training 0.7%, textbooks/supplies 7.2%, libraries 2.9%, mentoring/counseling 7.6%, child rights 10.1%, enrichments/clubs 4.3%, girls programs 11.2% and tutoring/remediation 1.4%. Authors noted that lowest scores were recorded in areas related to literacy such as teacher training and libraries.

According to the SACMEQ Policy Research Report No. 5, there are no Ministry guidelines for school size. Instead, school size and enrolment are determined by demand in a given locality. In terms of school enrolments for 2011/12 year, specific to grades 1, 2 & 3, it was observed an average enrolment of 44 boys and 42 girls in grade one, 41 boys and 39 girls in grade two and 40 boys and 39 girls in grade three and there was an estimated average class size of 55 children for the entire school. Results of this survey, further indicate that the median is 51- meaning 222 classes from the sampled schools had more than 51 students. The minimum number of pupils in the classes observed was 12 while the maximum was 142 at Ndakala primary School in Bulombwa Zone in Mungwi district in Northern Province.

Up to grade three, 11.6% of girls and 11.2% of boys enrolled were orphans and vulnerable children (OVC). Amongst the boys, there was a dropout rate of 5.4% from grade 1 to 3, while for girls - a higher dropout rate of 6% was observed. Overall, dropout rates were higher at each grade for girls than boys, 2.5% for girls and 1.9% for boys in grade 2 and at grade 3, the rate was 2.5% for girls and 2.3% for boys. These results demonstrate that girls have a higher risk of dropping out of school at any grade. Further observation shows that up to grade three, 37.7% of girls were given HIV/AIDS education compared to 36.5% boys, giving a relatively equitable but low coverage to both sexes.

3.5. MESVTEE Officials Support to Schools

This section discusses district and provincial MESVTEE officials' support to the schools, mainly because reading recognizes the critical role of instructional leaders. This role requires a strong, active commitment to supporting improved reading instruction and the implementation of scientifically based reading research in the classroom. Instructional leaders provide coaching and support and are responsible for establishing and communicating clear goals and expectations for student learning. Administrators at the district and provincial levels must be ready to provide the resources needed to ensure that schools are making adequate progress.

From the survey, 73% of respondents were male while 27% were female clearly highlighting the gender imbalances in leadership positions. The survey also found out that 56.1% of the officials have previous experience in teaching young children to read while 68% have previous experience in implementing NBTL with more than half (66%) having been trained in how to teach reading . On average, all interviewed officials have been in their current position for at least 5 years. Specific training about their

[4] Reported as advised by USAID funded SPLASH Project

role only shows 49% affirmative response and training topics included: leadership and management, management of CPD, PRP trainer of trainers, IRI and NBTL mentor. Regarding what they consider as the main purpose of their job, 50% said, to ensure that government policy is carried out while 18% said to identify and correct weaknesses at school level and 11% said to introduce new ideas in schools.

3.5.1. Focus on Reading

Survey results indicate 56% of officials know that schools set aside special time for teaching of reading for grades 1 & 2 while 44% know that grades 3&4 also set aside time teaching reading. Further analysis revealed that actual instruction in grades 1 & 2 is done in official local language (OLL) most of the time (49%), with all the time recording 37% and about half the time at 12%. In officials' perception, the major difficulty that teachers face with using OLL is that teachers think English is required (34%). Other reasons making the top three were teachers do not speak OLL well (24%) and are not trained to teach in local language. As far as officials know, the teaching program that teachers use is NBTL (41%), and ROC and SITE with both 26%. The common teaching methods of teaching reading are students sound out words (28%), teacher reads to students (22%) and students recite words at 16%. According to officials, learners in grades 1-3 are mostly performing unsatisfactorily at 42%, satisfactorily on average 29% and very poorly in all schools 27%. With regard to challenges of teaching reading, the main ones were shortage of materials 31%, poor teaching 28% and insufficient time for children to practice at 24%. In order to improve reading, 50% of officials take part in making the environment more conducive for learning while 25% in teacher training and monitoring teaching respectively.

3.5.2. School Information

Survey results showed that officials have access to the following top three information; EMIS data (numbers of students, teachers, classrooms etc) 15%, learner performance information (G7 results, Red Level Tracker, internal exam results etc) 14% and information about resources in the schools at 11%. Once information is gathered, 51% of officials analyze it as part of their regular job while 34% do it at key times like exam results and 15% do nothing or very little analysis. The reasons why information is analyzed is mainly for submitting information to superiors 25%, identifying general needs 23%, compiling statistics 22%, identifying good practices 20% and planning own activities 10%. Further, results indicated that 85% of officials personally use school information to monitor changes in schools. However, only 17% of officials reported to have had sufficient information about the schools that they work with and indicated that they would want additional information such as reports from zone officials and provincial/district colleagues.

It was noted that all information that officials have access to is used to compare schools with each other for the following purposes: to make the school aware of their shortcomings so that they can improve 38%, to prioritize schools for support 30% and identify schools that are excelling so that other learn from them (28%). In a close collaboration with zone officials, 78% of district and provincial MESVTEE officials rely on zone officials to collect information which is mostly used for planning zonal CPD activities (41%), for discussing problems or successes at zonal meetings of head teachers (34%) and planning at individual schools (16%).

3.5.3. School Planning

All officials considered planning as important and the top three plans that they expect to find in a school are teacher lesson plans (19%), school action plan which lays out steps to be taken in order to make improvements in teaching and learning (16%) and the SPRINT plan (15%). Other plans are school strategic plan stating major objectives (14%), year plan with important dates (13%), district strategic plan (12%) and an infrastructure plan (11%). All these plans are produced after the head teacher calls for a staff meeting and discusses the plan with other teachers (57%). Other means include; head teacher works with PTA 26%, head teacher draws a plan and puts it on the wall in the office (11%) and head teacher draws a plan and informs the teachers about it (4%). This result is in sync with findings presented in the head teacher section above where it was noted that there is little involvement of PTA

in planning. When schools are planning, 16% of officials are of the view that they use EMIS data while 15% said schools use PTA and teachers' opinions respectively.

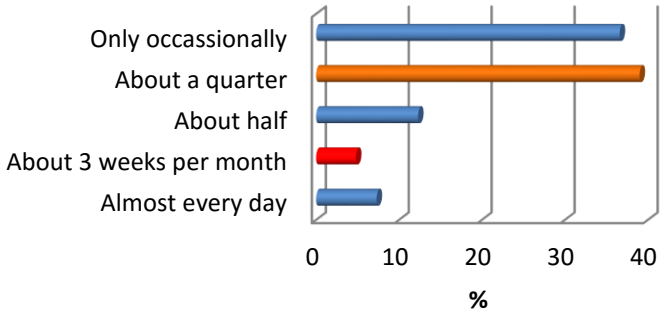
According to officials, school plans generally include issues such as learner performance improvement 23%, infrastructure improvement 21%, scheduling school routines 17%, making sure that teachers know how to teach well 13%, making sure that pupils learn how to read well 11%, buying additional teaching resources 10% and 6% of hiring additional teachers.

When asked about whether they personally use school information in their work, only 29% responded affirmatively and it is not clear why this is the case given that most officials consider planning as essential. For officials that use school plans, the major reasons cited for doing so were to monitor SPRINT 27%, monitor implementation of other plans 27% and to schedule visits 25%. In terms of assessing head teachers' attitude towards planning, most (45%) of officials said head teachers are willing to plan because they feel that their school can change for the better while 25% said head teachers see no point in planning because they do not have the resources to do anything new. Further, 15% of officials thought that the following statement best captures head teachers' attitude; 'conditions in schools are so difficult that we are just surviving-planning is just dreaming'.

3.5.4. Monitoring and Support

Survey results indicate that officials spend about a quarter of their time visiting schools. *See Figure 13* below. All schools get an equal turn of visits at 40% and some schools are mostly visited because they can fairly easily be reached (30%). Other reasons for mostly visiting a school were; schools that are known for underperforming 12%, schools that request for a visit for professional reasons 6% and schools where there were complaints 4% while random visits also make up 4% of the total visits. The focus of visits is on advising teachers on their work 16%, advising head teachers on their work 16%, reviewing teachers' lesson plans 16%, observe lessons 13%, study teachers' assessment records, sample children's written work 10%, go through school administration records 7%, listen to children reading 4%, check implementation of school plans 4% and spend discussing school matters with PTA 2%.

Figure 13: Approximate amount of time spent by officials visiting schools



After the visit, officials mostly provide feedback to school management 26%, individual teachers 25%, superiors in MESVTEE 25%, colleagues in the office 16% and the least is PTA. The feedback is mostly given in form of written report to superiors (29%), written report to individual concerned (24%), remarks in school log book (22%), informal discussion (16%) and comments written in teachers' or school's records (9%). Of all interviewed officials, the majority personally ensure that once feedback is given, action is taken 27% while 25% said they make sure school management acts on it. Yet others indicated that individuals concerned should act on it 24%, with 16% for the idea that the district/province should act on it and only 9% said it is quickly forgotten.

Officials believe that their visits make a difference with individuals who are prepared to listen (45%) with 27% out rightly saying it makes a big difference. Further, district/provincial officials-69% of them indicated that zone officials equally monitor and support the schools and they rated them as quite effective 53%, partly effective 41% and not effective 6%. Zone officials' reasons for visiting schools are similar to those of district/provincial officials where monitoring SPRINT and teacher training is on top at 22% apiece. Checking implementation of MESVTEE programs had 16% while class visits had

10%. In the opinion of district/provincial officials, when schools have a problem concerning teaching and learning, they request help from the district 39%, they try and so it themselves 32%, they try and get help from zone resource centre 23% and they mostly just live with the problem.

4.0. CONCLUSION AND RECOMMENDATIONS

4.1. Conclusion

From other studies, it is known that the opportunity to read produces higher levels of reading. In primary schools, especially from grade 1-3, teachers should devote a greater portion of teaching to read. Findings from this baseline survey show that overall students do not have foundational skills in reading. Based on results discussed in this report, the following conclusions were made:

1. Very Low Reading Levels

The results of the baseline survey do clearly show very low reading levels. Learners were unable to read at their age appropriate levels. The low reading level results are consistent with the Examinations Council of Zambia's National Assessment Surveys, SACMEQ Reports and other interest group findings. These results are augmented by MESVTEE district and provincial annual reports which also show low reading levels among learners. The trend of low reading levels has an implication on the quality of learners and might be a precipitating factor to increasing learner drop outs. As literature shows, low reading levels have ramifications on overall learners' academic performance and consequently affect their socio-economic development later in life with a possible but hidden negative implication on the country's development.

2. Weak Pedagogical Practices (methods of teaching reading)

Though the results showed that teachers were fairly knowledgeable on how to teach reading, particularly in terms of curriculum content, leaner performance in early grades is still too low. This finding is also in line with one of the conclusions in the 2012 National Assessment Report which pointed out that 'teachers are not able to successfully transfer knowledge and skills to learners. Results show weak pedagogical practices among most teachers as methods of teaching are not engaging but mostly teacher centered. To develop reading as a skill, learners need to practice adequately, supported by an enabling environment. Weak pedagogical skills, coupled with less time-on-task are challenges that might be contributing to low reading levels among learners. Provincial and district reports support the baseline findings that there are high absenteeism rates by both teachers and learners, leading to little time-on-task. Pedagogical practices and development of reading skills should be consolidated through rehearsal but this is not the case.

3. Ineffective and inconsistent assessment practices

Loaker et al (1986; p47) wrote that "learning increases when learners have a sense of what they are setting out to learn, a statement of explicit standards they must meet and as a way of seeing what they have learned." This is achieved through assessment. Though schools indicated implementation of school based assessment, the scheme was not clear and rather too generic to all schools and across districts. Schools usually conduct end of term assessments (tests) which are not accompanied by any standards and performance level descriptors. Learners ought to be assessed for the teacher to establish each learner's standard and level of performance. Ineffective and inconsistent assessment practices lead to teachers' weak pedagogical skills that focus on whole class as opposed to individualized or interactive teaching.

4. Weak learner support systems

Learners need to learn in a school setting that was safe, caring, friendly and supportive. Unfortunately, most primary schools did not have learner support systems, and where the system existed, they were weak and ineffective. Learners were left on their own to cope with stressors at school and at home. The PTA hardly participates in learner performance issues and parents and other members of the community rarely play an active role in children's learning trajectory. As a result of non-existence or weak learner support systems, learners faced with psychosocial problems fail to concentrate on reading, resulting into achievement levels inconsistent with their age appropriate performance.

5. Lack of community involvement

Findings from the baseline study highlight the current prevailing situation in schools that communities are insufficiently involved in the affairs of the whole school, and that of teachers and learners in particular. On learner performance, some head teachers envisioned that it was a responsibility of the school and teachers, and therefore did not involve PTA in planning and other decision making processes. Community members had no stake in learner performance as they entrusted the learners in the hands of the teachers who were expected to teach and provide support and care. Clearly, the current situation has an effect on the school, the teacher and on the learner, resulting into low reading levels.

6. Low monitoring support visits by officials

The study revealed that, though there were established structures for monitoring and support at national, provincial, district and zone level, schools for various reasons were not frequently monitored and supported. Even though the average of visits to schools was relatively high (at least 2 visits per school per year), survey results also showed that some cases schools were never visited and monitored for the whole year, particularly those in hard-to-reach locations. As a result of low monitoring, some schools had relaxed implementation of education programs leading to low reading levels and performance among learners.

6.2. Recommendations

For effective implementation of project interventions, the following recommendations were proposed:

1. Improve Teacher Effectiveness: Train Teachers:

Continuous Professional Development (CPD) is needed in specific instructional strategies and methods focused on reading, both pre and in-service training on reading instruction should be prime focus and intensify lesson demonstrations during CPD so that all other teachers are acquainted with phonics based approach of teaching reading. Further, encourage team work in the production of teaching and learning materials at school, zone and district levels so that local teams become self-sufficient.

2. Strengthen Education Leadership Management:

Through the project influence and MESVTEE's system, efforts should be directed at re-focusing head teachers' professional meetings from general topics like conditions of service to discussing school improvement plans. In addition, effective leadership can be promoted through exchange visits to both schools that are performing better as well as those performing poorly so they share good and bad practices among themselves. Encourage all schools to develop action plans for school improvement for the year, term and month in close consultation with the community. Encourage head teachers to attend CPD and demonstrate lessons at their schools.

3. Increase the use of performance assessment data to improve teaching and learning

The project should advocate that schools should set time for administering the proposed assessment scheme and discuss the results in CPD meetings to find solutions to identified learner performance challenges. RTS should further promote remedial work for learners after assessment.

4. Increase learner support services

Orient all teachers in the school to Guidance and Counseling and strengthening referral systems within the school setting and community. Community involvement should be improved so that there is more accountability and ownership from all relevant stakeholders.

5. Increase evidence based decision making process

The project should train head teachers and teachers in conducting school and classroom based action research, and how to share information among themselves, particularly through CPD activities or TGMs. In addition, the project should collaborate and build capacity in research with staff and students from pre-service colleges of education to enhance training in school and classroom based action research. There should be efforts towards galvanizing interest for the national research agenda that can then set the tone for education research on relevant topics in and around issues of teaching and learning and ultimately learner performance.

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6.0. ANNEX

Annex 1: Additional Statistics

Annex 1a: EGRA

Province	District	Letter Sound Knowledge				Non word Decoding			
		Sum	Maximum	Mean	Median	Sum	Maximum	Mean	Median
Eastern	Chipata	1481.00	38.00	3.73	1.00	464.00	28.00	1.17	0.00
	Katete	1246.00	74.00	6.46	4.00	450.00	24.00	2.33	0.00
	Lundazi	1903.00	39.00	4.76	2.00	348.00	25.00	.87	0.00
Luapula	Mansa	1140.00	45.00	7.13	0.00	333.00	30.00	2.08	0.00
	Mwense	787.00	43.00	7.87	0.00	476.00	36.00	4.76	0.00
Northern	Mporokoso	972.00	35.00	6.94	4.50	490.00	35.00	3.50	0.00
	Mungwi	614.00	34.00	4.48	1.00	121.00	25.00	.88	0.00
North-Western	Kasempa	588.00	28.00	2.97	0.00	375.00	31.00	1.89	0.00
	Mufumbwe	333.00	17.00	1.90	0.00	217.00	23.00	1.24	0.00
	Solwezi	1790.00	32.00	2.89	0.00	584.00	22.00	.94	0.00
Western	Kaoma	759.00	38.00	3.85	0.00	592.00	28.00	3.01	0.00
	Mongu	209.00	15.00	.44	0.00	51.00	17.00	.11	0.00
	Sesheke	1358.00	55.00	4.26	0.00	590.00	30.00	1.85	0.00
Muchinga	Chinsali	850.00	32.00	5.35	4.00	358.00	29.00	2.25	0.00
	Isoka	562.00	25.00	5.68	4.00	118.00	35.00	1.19	0.00
	Mpika	1054.00	47.00	5.58	1.00	564.00	40.00	2.98	0.00

Province	District	Oral passage reading				English Vocabulary			
		Sum	Maximum	Mean	Median	Sum	Maximum	Mean	Median
Eastern	Chipata	588.00	36.00	1.48	0.00	818.00	18.00	2.06	0.00
	Katete	546.00	42.00	2.83	0.00	1579.00	15.00	8.18	8.00
	Lundazi	459.00	28.00	1.15	0.00	2900.00	16.00	7.25	7.00
Luapula	Mansa	468.00	63.00	2.93	0.00	1475.00	19.00	9.22	9.00
	Mwense	671.00	62.00	6.71	0.00	879.00	19.00	8.79	8.00
Northern	Mporokoso	544.00	46.00	3.89	0.00	1141.00	19.00	8.15	8.00
	Mungwi	126.00	27.00	.92	0.00	1044.00	16.00	7.62	7.00
North-Western	Kasempa	527.00	46.00	2.66	0.00	1640.00	19.00	8.28	8.00
	Mufumbwe	276.00	30.00	1.58	0.00	586.00	14.00	3.35	0.00
	Solwezi	633.00	31.00	1.02	0.00	4657.00	20.00	7.51	8.00
Western	Kaoma	1295.00	47.00	6.57	0.00	1503.00	17.00	7.63	7.00
	Mongu	79.00	33.00	.17	0.00	147.00	11.00	.31	0.00
	Sesheke	1149.00	49.00	3.60	0.00	2618.00	17.00	8.21	8.00
Muchinga	Chinsali	321.00	49.00	2.02	0.00	1330.00	18.00	8.36	8.00
	Isoka	136.00	34.00	1.37	0.00	501.00	16.00	5.06	6.00
	Mpika	604.00	604.00	604.00	604.00	1287.00	18.00	6.81	7.00

Province	District	Orientation to Print				Reading Comprehension			
		Sum	Max	Mean	Median	Sum	Max	Mean	Median
Eastern	Chipata	742.00	3.00	1.87	3.00	20.00	3.00	.05	0.00
	Katete	421.00	3.00	2.18	3.00	30.00	3.00	.16	0.00
	Lundazi	728.00	3.00	1.82	2.00	28.00	2.00	.07	0.00
Luapula	Mansa	319.00	3.00	1.99	3.00	27.00	4.00	0.17	0.00
	Mwense	236.00	3.00	2.36	3.00	51.00	5.00	0.51	0.00
Northern	Mporokoso	334.00	3.00	2.39	3.00	26.00	3.00	.19	0.00
	Mungwi	319.00	3.00	2.33	3.00	9.00	3.00	.07	0.00
North-Western	Kasempa	519.00	3.00	2.62	3.00	40.00	4.00	0.20	0.00
	Mufumbwe	463.00	3.00	2.65	3.00	21.00	3.00	0.12	0.00
	Solwezi	1641.00	3.00	2.65	3.00	75.00	3.00	0.12	0.00
Western	Kaoma	367.00	3.00	1.86	3.00	86.00	3.00	0.44	0.00
	Mongu	33.00	3.00	.07	0.00	5.00	2.00	.01	0.00
	Sesheke	603.00	3.00	1.89	3.00	93.00	4.00	0.29	0.00
Muchinga	Chinsali	400.00	3.00	2.52	3.00	12.00	3.00	0.08	0.00
	Isoka	225.00	3.00	2.27	3.00	9.00	5.00	0.09	0.00
	Mpika	400.00	3.00	2.12	3.00	23.00	4.00	0.12	0.00

Province	District	Listening Comprehension			
		Sum	Maximum	Mean	Median
Eastern	Chipata	822.00	3.00	2.07	2.00
	Katete	448.00	3.00	2.32	3.00
	Lundazi	542.00	3.00	1.36	1.00
Luapula	Mansa	303.00	3.00	1.89	2.00
	Mwense	196.00	3.00	1.96	2.00
Northern	Mporokoso	342.00	3.00	2.44	3.00
	Mungwi	290.00	3.00	2.12	3.00
North-Western	Kasempa	381.00	3.00	1.92	2.00
	Mufumbwe	302.00	3.00	1.73	2.00
	Solwezi	1068.00	3.00	1.72	2.00
Western	Kaoma	301.00	3.00	1.53	1.00
	Mongu	32.00	3.00	.07	0.00
	Sesheke	709.00	3.00	2.22	2.00
Muchinga	Chinsali	337.00	3.00	2.12	3.00
	Isoka	153.00	3.00	1.55	2.00
	Mpika	361.00	3.00	1.91	2.00

Annex 1b: Classroom Observation data: Actual Classroom Observation Scores

Description		Observed	Not observed?	Total
Students are organized in Whole class	Count	277	194	471
	% within Description	58.8%	41.2%	100.0%
Students are organized in Small groups	Count	346	123	469
	% within Description	73.8%	26.2%	100.0%
Students are organized in Paired students	Count	47	421	468
	% within Description	10.0%	90.0%	100.0%
Teacher guides students to….Identify differences and similarities of sounds Instructional:	Count	200	270	470
	% within Description	42.6%	57.4%	100.0%
Teacher guides students to….Pronounce sounds of letters:	Count	264	205	469
	% within Description	56.3%	43.7%	100.0%
Teacher guides students to….Write letters:	Count	216	254	470
	% within Description	46.0%	54.0%	100.0%
Teacher guides students to….Associate words with letters:	Count	247	223	470
	% within Description	52.6%	47.4%	100.0%
Teacher guides students Discuss meaning of vocabulary words to…	Count	193	277	470
	% within Description	41.1%	58.9%	100.0%
Teacher guides students to...Blend letter-sounds to form syllables and words	Count	195	275	470
	% within Description	41.5%	58.5%	100.0%
Teacher guides students to….Read sentences	Count	264	205	469
	% within Description	56.3%	43.7%	100.0%
Teacher guides students to….Read printed material or book	Count	212	258	470
	% within Description	45.1%	54.9%	100.0%
Teacher guides students to….Answer questions or draw picture about meaning of text	Count	222	248	470
	% within Description	47.2%	52.8%	100.0%
Teacher guides students to….Write words or sentences as dictated	Count	147	321	468
	% within Description	31.4%	68.6%	100.0%
Teacher guides students to Create or write own texts (sentence or story)	Count	90	380	470
	% within Description	19.1%	80.9%	100.0%
Teacher guides students to….Speak about own lives, events or stories	Count	79	391	470
	% within Description	16.8%	83.2%	100.0%
Most students are Listening to teacher read out loud	Count	389	81	470
	% within Description	82.8%	17.2%	100.0%
Most students are Reading out loud together (choral reading)	Count	327	143	470
	% within Description	69.6%	30.4%	100.0%
Most students are Reading out loud to another student (paired reading)	Count	95	375	470
	% within Description	20.2%	79.8%	100.0%
Most students are Reading independently (by him/herself)	Count	203	267	470
	% within Description	43.2%	56.8%	100.0%
Most students are Repeating/Recitation	Count	311	159	470
	% within Description	66.2%	33.8%	100.0%
Most students are Answering teacher's questions	Count	373	95	468
	% within Description	79.7%	20.3%	100.0%
Most students are Writing on blackboard (by students)	Count	236	232	468
	% within Description	50.4%	49.6%	100.0%
Most students are Writing on paper, in exercise book or slate (by students)	Count	329	139	468
	% within Description	70.3%	29.7%	100.0%
Most students are Working on group projects (by students)	Count	111	357	468
	% within Description	23.7%	76.3%	100.0%
Most students are Playing learning games, sketches or songs organized by teacher	Count	146	321	467
	% within Description	31.3%	68.7%	100.0%
Teacher Introduces lesson by explaining what students will learn	Count	395	73	468
	% within Description	84.4%	15.6%	100.0%
Teacher Conducts lesson in local language	Count	397	71	468
	% within Description	84.8%	15.2%	100.0%
Teacher Reads aloud to students	Count	386	82	468
	% within Description	82.5%	17.5%	100.0%
Teacher Demonstrates reading or writing skills	Count	323	145	468
	% within Description	69.0%	31.0%	100.0%
Teacher Asks students questions about lesson	Count	349	119	468
	% within Description	74.6%	25.4%	100.0%
Teacher Responds to student questions	Count	154	313	467
	% within Description	33.0%	67.0%	100.0%

Teacher Provides explanation if student(s) don't understand	Count	322	146	468
	% within Description	68.8%	31.2%	100.0%
Teacher Gives class work for students to practice	Count	381	86	467
	% within Description	81.6%	18.4%	100.0%
Teacher Concludes lesson with summary of what was learned	Count	292	175	467
	% within Description	62.5%	37.5%	100.0%
Teacher Praises or compliments students	Count	350	116	466
	% within Description	75.1%	24.9%	100.0%
Teacher Criticizes, scolds or punishes students	Count	75	389	464
	% within Description	16.2%	83.8%	100.0%
Teacher Beats students	Count	50	416	466
	% within Description	10.7%	89.3%	100.0%
Teacher assesses student learning by Asking questions during the lesson	Count	389	77	466
	% within Description	83.5%	16.5%	100.0%
Teacher assesses student learning by Monitoring students as they work to check understanding	Count	353	113	466
	% within Description	75.8%	24.2%	100.0%
Teacher assesses student learning by Observing student activities	Count	325	141	466
	% within Description	69.7%	30.3%	100.0%
Teacher assesses student learning by Listening to individual students read aloud	Count	274	191	465
	% within Description	58.9%	41.1%	100.0%
Teacher assesses student learning by Using a reading assessment tool	Count	109	357	466
	% within Description	23.4%	76.6%	100.0%
Teacher assesses student learning by Giving quiz or test to class	Count	83	383	466
	% within Description	17.8%	82.2%	100.0%
Teacher uses Blackboard	Count	422	44	466
	% within Description	90.6%	9.4%	100.0%
Teacher uses Textbook	Count	325	141	466
	% within Description	69.7%	30.3%	100.0%
Teacher uses Supplementary reading resources	Count	113	353	466
	% within Description	24.2%	75.8%	100.0%
Teacher uses Work sheets	Count	75	390	465
	% within Description	16.1%	83.9%	100.0%
Teacher uses Poster/wall charts (with letters, words, pictures)	Count	197	269	466
	% within Description	42.3%	57.7%	100.0%
Teacher uses Flash cards	Count	142	324	466
	% within Description	30.5%	69.5%	100.0%
Teacher uses Story books	Count	219	247	466
	% within Description	47.0%	53.0%	100.0%
Teacher uses Student exercise books and/or slates	Count	304	162	466
	% within Description	65.2%	34.8%	100.0%
Teacher uses Manipulatives (e.g. real objects, sandbox, etc.)	Count	81	384	465
	% within Description	17.4%	82.6%	100.0%
Teacher is Sitting or standing in front of class or at blackboard	Count	399	67	466
	% within Description	85.6%	14.4%	100.0%
Teacher is Moving throughout the classroom/space	Count	327	139	466
	% within Description	70.2%	29.8%	100.0%
Teacher is Not paying attention to students/doing own work	Count	47	419	466
	% within Description	10.1%	89.9%	100.0%
Teacher is Away from the classroom	Count	31	433	464
	% within Description	6.7%	93.3%	100.0%

Annex 1c: Teacher Performance Data

Teacher Interview Performance matrix	Control			Intervention			Missing	% Yes
Question.	Yes	%	No	Yes	%	No		%
Is it your responsibility to take class attendance register	78	87.6%	11	372	95.6%	17	7	92.8%
Do you have an attendance record/book for this class	73	92.4%	6	353	94.6%	20	33	87.8%
Teacher can produce attendance record	73	94.8%	4	341	96.1%	14	53	85.4%
Did you take this class attendance register today	45	59.2%	31	293	83.2%	59	57	69.7%
Do you have a scheduled time for teaching Reading	79	88.8%	10	360	93.0%	27	9	90.5%
Do you have a lesson plan for Reading Lessons	72	80.9%	17	324	83.1%	66	6	81.6%
Teacher can produce note book or folder with a lesson plan for Reading	62	88.6%	8	297	92.8%	23	95	74.0%
Do you have a Lesson Plan for the Lesson observed	61	67.8%	29	292	74.9%	98	5	72.8%
Can you produce the lesson plan or script for the lesson observed	56	98.2%	1	274	95.1%	14	140	68.0%
Teacher can state name of the letter on Letter Card # 1	76	87.4%	11	358	92.7%	28	12	89.5%
Teacher can pronounce the sound of the letter on Letter Card # 1	66	76.7%	20	328	85.0%	58	13	81.2%
Teacher can pronounce the sound of digraph on Letter Card # 2	75	84.3%	14	367	94.6%	21	8	91.1%
Teacher can pronounce the sound of the two consonant blend on Letter Card # 3	62	68.9%	28	305	79.0%	81	9	75.7%
Teacher has heard of Teacher-Group-And-Individual centered approach to reading	78	95.1%	4	341	90.9%	34	28	86.4%
Teacher can correctly explain the approach	84	97.7%	2	337	95.5%	16	46	86.8%
Teacher was able to describe active learning technique used in class	62	74.7%	21	296	78.9%	79	27	73.8%
Teacher keeps track of students' progress in learning to read	70	79.5%	18	271	70.6%	113	13	70.3%
Teacher can produce students' progress or report book	37	53.6%	32	195	52.8%	174	47	47.8%
Teacher keeps record of structured assessments	60	84.5%	11	231	86.8%	35	148	60.0%
Teacher keeps notes of informal students' assessments eg. Observations and home work	52	74.3%	18	181	69.9%	78	156	48.0%
Does Teacher use criteria to assess whether students achieved the learning outcomes of the reading lesson	65	86.7%	10	295	85.5%	50	65	74.2%
Do teachers have a school-learner performance improvement plan	36	51.4%	34	169	51.4%	160	86	42.3%
Teacher can readily explain school-learner performance improvement plan	32	64.0%	18	166	77.2%	49	220	40.8%
Teacher has ever made own teaching- learning aid for teaching reading	65	82.3%	14	318	85.5%	54	34	79.0%
Teacher ever received guidance from school head to help teach more effectively	66	75.0%	22	327	84.7%	59	11	81.0%
Teacher ever been observed teaching a lesson	56	64.4%	31	239	63.4%	138	21	60.8%
Results from observation discussed with teacher by observer	58	98.3%	1	237	97.9%	5	184	60.8%
Teacher finds feedback helpful	77	98.7%	1	323	98.5%	5	79	82.5%
Teacher ever received training on how to teach reading using Phonics or letter sounds	56	62.9%	33	240	63.7%	137	19	61.0%
Time ever been scheduled for teachers to share ideas and materials in the last four weeks	41	74.5%	14	182	74.0%	64	184	46.0%
Teachers ever hold organized teacher group meetings at the school	72	83.7%	14	336	88.2%	45	18	84.1%
Teacher groups ever conduct group projects or research to improve teaching or learning	27	33.8%	53	173	49.9%	174	58	41.2%
Teacher group meeting at the zonal center	51	57.3%	38	241	65.0%	130	25	60.2%
Zonal Teacher group meetings helpful to the teacher	39	100.0%	0	183	98.4%	3	260	45.8%
Teachers meet or talk individually with parents to discuss students school performance	73	83.0%	15	322	85.6%	54	21	81.4%
Teachers prepare progress reports on the students to send to their parents or guardians	47	54.7%	39	250	66.3%	127	22	61.2%
Parents or guardians ever ask to meet teachers to discuss child's school work	45	51.7%	42	226	59.8%	152	20	55.9%

Teacher knows that child is having trouble with reading if a child;				
		Responses		
		N	Percent	Percent of Cases
having trouble	Can't make letter sounds	254	20.0%	54.0%
	Can't sound out words	321	25.3%	68.3%
	Can't string words into sentence	121	9.5%	25.7%
	Reads very slowly	66	5.2%	14.0%
	Skips word when reading	117	9.2%	24.9%
	Can't complete reading assignments	102	8.0%	21.7%
	Can't answer questions about text s/he just read	108	8.5%	23.0%
	Does not participate in class or group reading activities	106	8.4%	22.6%
	Goes not volunteer for reading activities	55	4.3%	11.7%
	Other	17	1.3%	3.6%
	Teacher does not know	2	.2%	.4%
	Total	1269	100.0%	270.0%

Teacher take following action to help a child having trouble;				
		Responses		
		N	Percent	Percent of Cases
helping those having trouble	Work one-on-one with student	319	33.9%	67.4%
	Give extra assignments	352	37.4%	74.4%
	Pair with a good student	129	13.7%	27.3%
	Find someone to work with/tutor the student	40	4.3%	8.5%
	Recommend outside tutoring	34	3.6%	7.2%
	Talk to parents	54	5.7%	11.4%
	Report to head teacher	10	1.1%	2.1%
	Take no action	3	.3%	.6%
	Total	941	100.0%	198.9%

Annex 1d: Head Teacher Data

Head Teacher Performance checklist and Interview matrix	Control			Intervention			Missing	% Yes
Question.	Yes	%	No	Yes	%	No		%
Qes.14b Reading taught as a separate Subject in the school for Grade 2.	29	76.3%	9	97	63.4%	56	6	64.0%
Qes.14c Reading taught as a separate Subject in the school for Grade 3.	30	76.9%	9	100	63.3%	58	0	66.0%
Qes. 37 Topic focused on teaching quality and/or Student learning	38	97.4%	1	152	96.2%	6	0	96.4%
Qes. 38 teachers ever conduct Joint projects to improve classroom teaching-learning	25	64.1%	14	115	72.8%	43	0	71.1%
Qes. 39 teachers required to prepare daily lesson plans	39	100.0%	0	154	97.5%	4	0	98.0%
Qes 47. Head Teacher can provide form, notes or documentation	31	79.5%	8	129	81.6%	29	0	81.2%
Qes 48. Prepare individualized personal teacher improvement plans	17	43.6%	22	76	48.1%	82	0	47.2%
Qes 50. Head teacher can produce a teacher improvement plan for this year or last year	15	83.3%	3	54	77.1%	16	109	35.0%
Qes 51. Principal's responsibility to support student learning	39	100.0%	0	155	98.1%	3	0	98.5%
Qes 57. Problem with Teacher attendance and/ or punctuality at the school	15	38.5%	24	52	32.9%	106	0	34.0%
Qes 60. Head teacher can show teacher attendance record	31	83.8%	6	110	72.4%	42	8	71.6%

Qes 61. Head Teacher disciplines teachers for unexcused absences or lateness	36	94.7%	2	134	89.9%	15	10	86.3%
Qes 63. Problem with student attendance and /or punctuality	34	91.9%	3	136	88.3%	18	6	86.3%
Qes 66. School has goals or targets for learner performance	29	78.4%	8	143	91.7%	13	4	87.3%
Qes 67. Head teacher can show justification	18	64.3%	10	103	75.2%	34	32	61.4%
Qes 70. Head teacher can produce some form of improvement plan for this school	19	57.6%	14	97	65.1%	52	15	58.9%
Qes 74. Presence of parent teacher Association	37	97.4%	1	152	96.8%	5	2	95.9%
Qes 79. Head teacher has developed a school improvement plan with the PTA or com for this school year	27	79.4%	7	133	89.3%	16	14	81.2%
Qes 81. Head Teacher giving academic example	30	83.3%	6	134	90.5%	14	13	83.2%
Qes 82. PTA or community support of the plan sufficient to meet its objectives	15	41.7%	21	70	46.1%	82	9	43.1%
Qes 84. School has guidance and counseling teachers	33	84.6%	6	130	84.4%	24	4	82.7%
Qes 86. Head teacher also has classroom teaching responsibilities	31	96.9%	1	128	97.7%	3	34	80.7%
Qes. 89 School has G&C service without G&C Teacher	16	84.2%	3	61	88.4%	8	109	39.1%
Qes 95. Head teacher answered to re-enrollment of girl students who have delivered	37	97.4%	1	149	99.3%	1	9	94.4%
Qes 103 MESVTEE official visits have contributed to improving the quality of instruction and student learning at the school	18	90.0%	2	78	96.3%	3	96	48.7%
Qes 105 Ever attended the NISTCOL ELM diploma course for head teacher	12	31.6%	26	43	29.1%	105	11	27.9%
Qes 106 Ever received training on your role and how to carryout duties as head teacher	11	50.0%	11	51	48.1%	55	69	31.5%
Qes 108 Ever received training on how to teach reading using phonics or letter sounds	34	89.5%	4	127	85.8%	21	11	81.7%

Annex 1e: General School Information

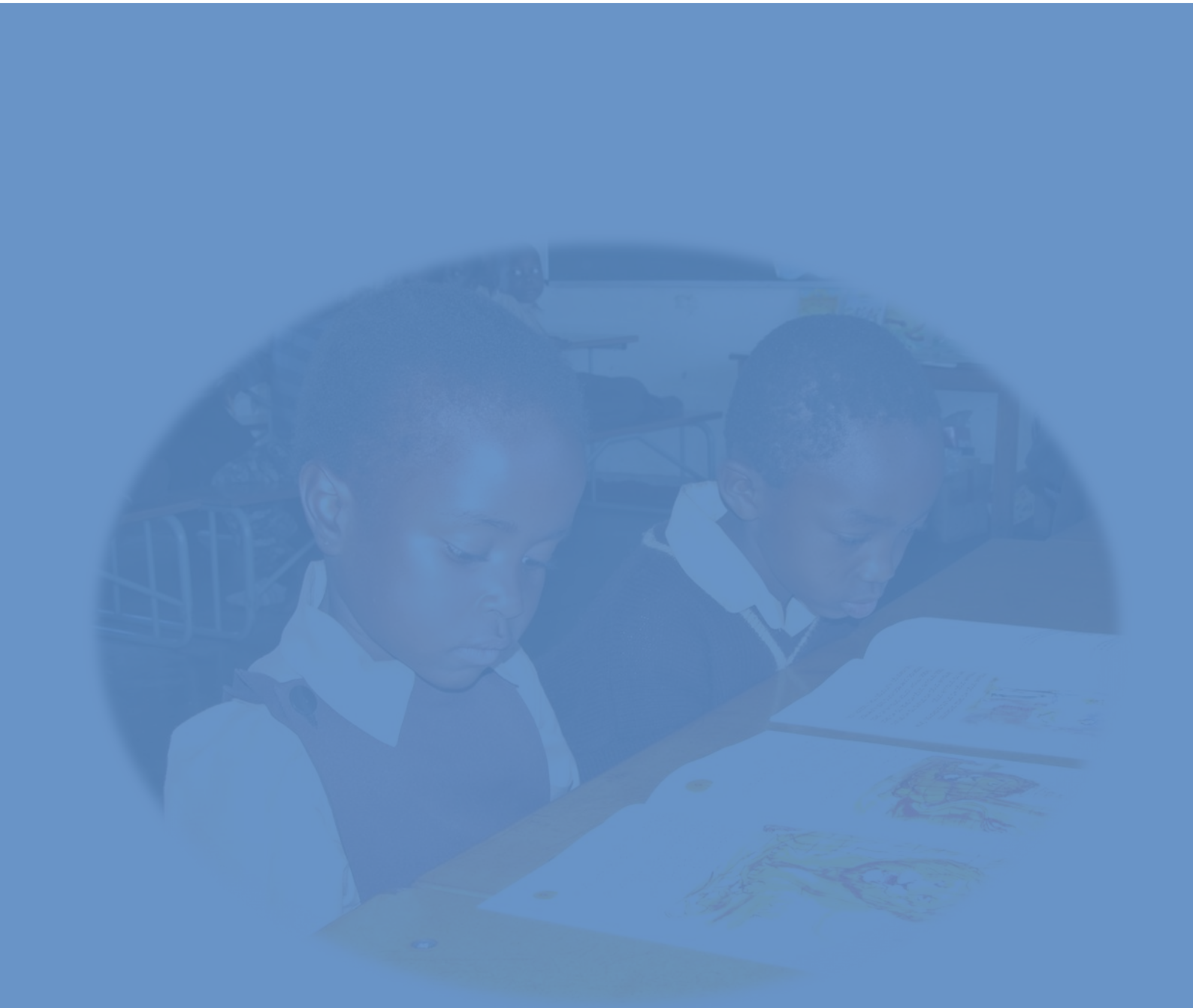
Grade	Enrollment AY 2011/12		Drop-outs		Average attendance rate		HIV/AIDS education		Girls & OVC Enrollment		Girls and OVC receiving support	
	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
1	6895	6573	132	101	4393.98	4198.01	2361	2320	761	613	20	20
Average per school	44.2	42.1	1.1	0.8	36.9	35.3	26.5	26.1	5.1	4.1	1.3	1.3
2	6334	6151	156	142	3961.8	4000.2	2316	2128	697	645	31	19
Average per school	40.6	39.4	1.3	1.2	33.3	33.6	26.0	23.9	4.7	4.3	1.9	1.2
3	6160	6041	119	105	3990.2	4053.7	2322	2204	715	676	24	42
Average per school	39.5	38.7	1.0	0.9	33.5	34.1	26.1	24.8	4.8	4.5	1.5	2.6
4	5728	5842	136	139	3809.2	3784.9	2567	2535	723	691	41	38
Average per school	36.7	37.4	1.1	1.2	32.0	31.8	28.8	28.5	4.9	4.6	2.6	2.4
5	5155	5260	201	162	3796.8	3559.4	2280	2447	784	722	34	32
Average per school	33.0	33.7	1.7	1.4	31.9	29.9	25.6	27.5	5.3	4.8	2.1	2.0
6	4620	4819	122	109	3128	3423	2251	2320	784	755	34	41
Average per school	29.6	30.9	1.0	0.9	26.3	28.8	25.3	26.1	5.3	5.1	2.1	2.6
7	4050	5500	236	180	3266.3	3582.2	2306	2360	662	771	35	49
Average per school	26.0	35.3	2.0	1.5	27.4	30.1	25.9	26.5	4.4	5.2	2.2	3.1

Annex 1f: MESVTEE Data

MESVTEE Officials Interview Form	Response			
Question.	Yes	No	Missing	% Yes
7. Do you have previous experience in teaching young children to read?	24	18	0	57.1%
8. Do you have previous experience with implementing NBTL? :	29	13	0	69%
10. Have you ever been trained on how to teach reading? :	28	14	0	66.7%
11. As far as you know, do the schools that you work with set aside special time for the teaching of reading in: Grade 1	23	19	0	54.8%
11. As far as you know, do the schools that you work with set aside special time for the teaching of reading in: Grade 2	23	19	0	54.8%
11. As far as you know, do the schools that you work with set aside special time for the teaching of reading in: Grade 3	18	24	0	42.9%
11. As far as you know, do the schools that you work with set aside special time for the teaching of reading in: Grade 4	18	24	0	42.9%
23. Do you personally use school information to monitor changes in schools?	38	3	1	90.4%
24. Do you feel that you have sufficient information about the schools that you work with to do your job effectively?	7	35	0	16.7%
26. Do you use school information to compare schools with each other?	40	2	0	95.2%
28. Do zonal officials collect any school information?	32	10	0	76.2%
29. If so, do they use it to promote school improvement?	26	8	8	61.9%
36. Do you personally use schools' plans in your work?	10	25	7	23.8%
45. Do zonal officials also monitor and support work at schools?	29	13	0	69%

USAID/ZAMBIA READ TO SUCCEED PROJECT

(Contract No. aid-611-c-12-00003)



September 2013

USAID/Zambia Read to Succeed Project
Creative Associates International
Private Bag E891, P.O. Box 642, Manda Hill, Katimamulilo Road, Olympia Park
Plot # 6831 – Lusaka, Zambia